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<210> 4168

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4168

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<210> 4169

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4169

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<210> 4170

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4170

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atggatgtgt ttcatacctt ctcagaattg gtatatcaag acacatttaa atataagccc 360
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 aaggagaagc tgaggaacga naagaaanct tcgacaaaga gaatgggnaa tgtacatgct 660
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<210> 4171

<211> 578

<212> DNA

<213> Homo sapiens

<400> 4171

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 gctgattttc aaccaaataa aaaaaatcaa gtgcatttca gaagcttttg gaagagcagc 180
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 cacanggacc acaaaacaac tagccatgat gggagacagg agttttttac atggaaacat 480
 ggcacctgtg tttttatgtg gcaagatctt tatctatagg caanangtat gaaatttccc 540
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<210> 4172

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4172

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ctcttctagt ttttggatga cccatcatct cttacctcac ctacagcagg aaccttgaaa 180
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aagccctcca cccacgggtc ctttccttcc tggctcgcca catcttccaa gtccatntct 600
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gattatgttg cnagcccnaa a 681

<210> 4173

<211> 646

<212> DNA

<213> Homo sapiens

<400> 4173

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ctgggtagaa aatacagcat ttccacagaa aaggacgaga tcttgtctga tgtggcatct 180
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gcaatggaca acactgttgt gatggaggaa atcacaaggt tgtgcaggac cagcgttccc 600
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<210> 4174

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4174

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gagtgcnagg tggcagtatt gtggggcgcc cgacgggagc cagagagctg tactggtcca 180
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cagcnatgct atccacaatg actttgcaag gatgactccc tctaaccttc ctccctgcta 720
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<210> 4175

<211> 802

<212> DNA

<213> Homo sapiens

<400> 4175

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 tatggagacc tgattttatt ttgtaagagg tgggcaaccc ctgaagcatt ttagtgatgc 180
 gaacagatgt gtctgttacc aagcaaagcc agttaaagaa ggtcacagag gaggaatgat 240
 cacaaagagt ctgagaagcc aactggggcc aaacaagttt tagaacctct actggctgat 300
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<210> 4176

<211> 565

<212> DNA

<213> Homo sapiens

<400> 4176

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 caaactgtat gtggttggag gaagagatgg actgaagact ttgaatactg tagagtgcta 180
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 ggtggtcgtg atgggaagtt cttgtctcaa atcagtagaa tgtttttgat cctcatacta 480

ataangtgga cactgtgttg cacagatgtc aaaanggaaa aggtggcntt aggagtgacc 540
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<210> 4177

<211> 563

<212> DNA

<213> Homo sapiens

<400> 4177

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tgcctagggga tcagccccac tgtcttttct ttgtataact aaatctgcat tttaaagtgt 180
tgtcaatcac atttttctta gagctgaata tccaggctgt aattctctaa accctttttc 240
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nctaactgn ttgngaaat tcataaccag gcactcaaat atccttggtg gcctacgaaa 480
agttagtaag gnaataaatt ttgcctttgg tagggaagaa ctacaaaagt tgnnaatcct 540
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<210> 4178

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4178

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ctcttttaac acaagccttc cccttccttc caaagcaga aagtcacaat gactctagta 180

ttttaaaatg aagaacccac gtgcggagga gtgaagccaa tatagtaata tctgaatgcc 240
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 catctagtgg agtacatgaa acaataacca tgccatgaca ttcaaataca tacacatcaa 480
 aatgtagtat tgactcatgg gtcaattatt tttattttgc tgcttaaaac ttttgttttc 540
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<210> 4179

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4179

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 gggggctcga agtcccgcc tgggggtccc cgatgccgcc cgggggtcct caagnttacc 600
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<210> 4180

<211> 831

<212> DNA

<213> Homo sapiens

<400> 4180

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gctccatccc tcagtgcacg tatgccttct gtagcagatt ctcactctag tcatttttct  180
gaatttagtt gttctgacct agaaagcatg aaaacttctt gtagtcatgg ttccagtgat  240
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tcacagttga atcatattgc tgaagaacat ggtaacaatg gaataaaacc taatgttgat  420
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gtgtcatgtg gatcttaagt taccaaacta tgaagtgaag gcttttaaaa gtgcattatt  720
ttaaaggnta ataaattttg aagagcaaag caangttttg tgtggtttgg cacaannaca  780
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<210> 4181

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4181

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aagcccagtg gtgcccagtt gcctccaggt cccagacctt tatgtggaca agaaaagctt 180
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<210> 4182

<211> 647

<212> DNA

<213> Homo sapiens

<400> 4182

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 cttgaactcc tgacttcgtg atccgcccc ccctcaagcc tcccaaagtg ctgggattac 480
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<210> 4183

<211> 612

<212> DNA

<213> Homo sapiens

<400> 4183

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cttgggagac agacgaaagc ttagggcaca ttggaggaca gcgcagctgt ggctccatt  180
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<210> 4184

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4184

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tttgccgccg ccgtcccgca gctgctgttt ccggagttgc cccttcccca tgttccgggg  180
caggagtccg caaagcgaag atccgcccgc cggttcccca tcatgtccga actgactaaa  240
gagctgatgg agctggtgtg gggcaccaag agcagccccg gtctctcgga caccattttc  300

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tgccgctgga cgcaagggtt tgtgttttagt gaatcagagg gatctgcatt agaacagttt 360
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 gcanaagtct aanttgccaa gtggaacatt cttctgcctt ggntgtccaa gagcttggct 660
 ttgagcgatt tcaatgcatt aaattcaaaa aagatngttc aanaagttta acaannattt 720
 aaaaaggatc tgtcctggg 739

<210> 4185

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4185

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<210> 4186

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4186

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ctcttgctct gcttttaaat tcaatTTTTT aaagttggcc attgcnttaa aagatttact 720
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<210> 4187

<211> 708

<212> DNA

<213> Homo sapiens

<400> 4187

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 taagaggtac tcaccagatg agctgcggtg tctgccatta aacacagncc tgtatgagcc 600
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<210> 4188

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4188

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 actcagtgtg tataaatgat gaagaataaa tatgcttatt ggagatcatt ttaatctatg 480
 aagcactgtg agacataagc tgttatttat caaaaaatat aattctaag ttgccccagt 540
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 anaattgggg tgtagaaacg atactggagt atttgtgtca agcattgtca aaggaggaggaa 720
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<210> 4189

<211> 609

<212> DNA

<213> Homo sapiens

<400> 4189

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cgtcaacacc tgcagtggcc cagacatcgc acgctccgtc tcctgcccac tgctctcccg 180
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cctaccacca gtcagctccc cacatactca caggggctac cagccaacac caaccatggg 540
caagtacgtc aagattctgt atgacttcac anncccgnaa tgccaacgag ctatcngtng 600
ctcaaggat 609
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<210> 4190

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4190

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attaatcaaa tctgttttaa gaaaattaat tacttgattt tgaaaactgt aagatatact 420
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caacatgaca atatagagga agagcaatta agattcccat acactttgac cctgttattc 600
catccttaag aaattatttc aaagaaatag ntcaatagag atgaaaagcn tantggnaca 660
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<210> 4191

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4191

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<210> 4192

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4192

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ggaaagatct gcctcttctc caagaaactc aaccactagt gacaatgacc agcctcctga 180
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ccaagggaga ancattgatt gatgtgggca aaatccaaag ctccagccaa ggtcgcagtc 600
ccaaatgccg acattcactg actccaaggg gaccaangac atgggagaaa gctgtttann 660
gatnancctt aaaccaa 677
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<210> 4193

<211> 618

<212> DNA

<213> Homo sapiens

<400> 4193

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cagctgccct ctgtgcaagc cattacccca ccangcctga cacagcttct ctctctgggc 480
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<210> 4194

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4194

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 ccctctctgg cctggctcat ggtatggccc cctccccctgg tcgccccag cegtccacg 180
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 tttccccaag gatcagccan aggaggaacg ggggaaacan gagtctctc ctaaccatc 660
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<210> 4195

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4195

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tcctgtcatg gaaattagtc aatccaatta ttattattat agaagtctgt tttcaccaga	180
aagtttgtga actgacaacc gtaaaatctg tggtaaattc acaggcttca tcaatgacac	240
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tggtccacaa gtttccaaga caagcacatt cctgccaca tgatccttgg acaaactggt	540
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<210> 4196

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4196

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gatatacaaa aaaaggctat acaaagtata tacaagaaa tgcatacaag ctgtgtgtata	540
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gcttaggaaa agaggctgac ctagctatgg agaaatTTTT tgggtgagtc ttaaaagaga 660
 aaattttcct ggcaagaaaa agaggggaaa gaattttggg ngtcagtga gatnagcaat 720
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<210> 4197

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4197

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 tgtcttcctt accctcttca ttgcctcttt caacagtatg aagttaaaat cagctctgaa 180
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 ccctanagtg gaaggagggt ctgggaaagg acctttgcct gaaactaana agtcaacatg 540
 gntacccttc aatancccac ctgggaaggg agctgccnat gagccggaag cagntgggga 600
 ggagatgaaa ctggggctat cggctttgca ngctgggagc cccctcctgt anctgcctta 660
 tcttcnggta t 671

<210> 4198

<211> 389

<212> DNA

<213> Homo sapiens

<400> 4198

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 ggagccggac gcggtaatgc cccagcggcg cagcgggcgg ctgcgtccct gagccgctat 300
 ataagcgcg caggggaacat ccggaggggc tgaagatgaa ggtgcccgcg catgggcccc 360
 cgctgattgc cagtccttct ngancccg 389

<210> 4199

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4199

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<210> 4200

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4200

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agtttcaact ctttacaatg aacatattta tcttttttaa aaaataaagc cattttaaaa   300
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<210> 4201

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4201

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tcctgtctga gaactatggt aacagatggt aatagttgca gggctctcacc acttcattag   180
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<210> 4202

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4202

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 ttttgg 726

<210> 4203

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4203

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tggatttatt gtgttactat ggtgaccagg agccctcaac tgattacat tttcaacaaa  180
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aggaggtt                                     728

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<210> 4204

<211> 873

<212> DNA

<213> Homo sapiens

<400> 4204

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ataatccaaa attctttggc aatcttcagt ctgatgattc caaaaaaat gactcaaaaa   60
taaaagttac tgtgttggaa atgtctgaat atttgaacaa atatgaaagc atgtcctcaa  120

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ataaagactc aaaaaggcct aagacatgtg agcaaaatac tcaacttaat agcatagaga 180
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 aatctgtcnt gaactaacgt ttccgatact ctcgggcaat tgttgatggg ntttactgcc 720
 naggtaaggg gcaagtgggt gctttctggc ccaanacaat ttgacctctt ccaagttnga 780
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<210> 4205

<211> 577

<212> DNA

<213> Homo sapiens

<400> 4205

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 ctaccgccac cgccaccgcc accgccgccg agtgctgtct ctatggcgag gaggaggagg 180
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 ccgagtttcc aagtgtggnt gcaagacca ttggngaatt caggagcaat gctggctatc 480
 aataccaact atttgcgggg gtaaagttag acttgtnaa ggataattta agctagggac 540

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577

<210> 4206

<211> 505

<212> DNA

<213> Homo sapiens

<400> 4206

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<210> 4207

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4207

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 aatgtcaaaa gttacatcaa aaataatggc tctgattgtc catcatctca ttcatttaat 180
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gataaaaatg ggataaaggg aggtttgaaa agtgtttctt tattcacatc aaagctagca 360
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ccatctaatt tgggtaaant caccaaaggc acattantag gaaggacttc atattcttcg 480
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caaaaggcct aaagcgaact cctgtgccac caaaagcagt tctggagaaa agcttaactc 600
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<210> 4208

<211> 552

<212> DNA

<213> Homo sapiens

<400> 4208

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taccaggggg tactgacctt gatttctcct acaaggacca cactgccttt gngtttaatg 480
gaatgcaatt tgtgtacctt ctaancanat anctgcagtt cctcattttt anaaaacttt 540
gatatcatgc ca 552

<210> 4209

<211> 654

<212> DNA

<213> Homo sapiens

<400> 4209

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ttcacaggat ggggaaacaa ggcaccgaag tgggaccaca gctcaaatcc tgtgtgactc 180
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atggatttgt caacaaaagg gttgtcctgn gaaacaaatc cagattcang ttcacccanc 600
aacaancctg aaatgcttgc aagggcangg gacaattcgg ggggaaacgt ctgg 654

<210> 4210

<211> 822

<212> DNA

<213> Homo sapiens

<400> 4210

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catttcttgg ggcacacttg attgaaaact gagacttctg aagagaaggc cagaagatac 180
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gaacatgatg catttgaaaa tattgttcaa tgcagcaaaa gtcagtttcc gttaaggcaa 600
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cagagcaaaa gggctatgaa ataaaagaac tccgttgaag tttactggga atggggactc 720
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<210> 4211

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4211

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gtttaatttt tataaacaaa aatagctata aagtacaaag ctgctgctgc atgcaacctt 180
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<210> 4212

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4212

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gtggttgggg aggccgccac actcttcctg actcacctca aggtacctgg caggtttgat  180
ctaccagcaa gtgcctgcct gcagggccac ctctggatga gtggggaggc caggtttgcc  240
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aatttacaga ttagaaaaac tgagactgag antggttaag ggactttgcc aagtctgtca  720
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<210> 4213

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4213

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cgaggtggga ggaatgcttg agccccagct ctgggcaata tagtgagacc ccactctctgc  120
aaaaaaagaa gttccagagg cccagacttg ctactggtgc ccagggggct gtggggcagc  180
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attgaattgg aggacaccca actggtgtcc gctgcagaac tgattgcttg cctgggtggg 300
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 gttgatgtcc tgagaatctt cttgctgtcg gaagggtcct cctgccctca agcatttctc 600
 tctgggaagc tcttagacta ctctctcagt catgccacc ttttcggtca tangtcanaa 660
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<210> 4214

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4214

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 ttgcaagctg actaccatac ctacacaag cgttgggtgt gtgagcgggc catgaaaagc 660
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<210> 4215

<211> 839

<212> DNA

<213> Homo sapiens

<400> 4215

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gttcttcgtc tcaagaggaa ctgacttctg ttgagcactc aacacgccac agagaccagc   180
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gaattttgtg aaacaaatgt agnccccatc ataaggggca agatttgga caattgntaa   780
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<210> 4216

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4216

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 accctgtggg gaagnccctt a 801

<210> 4217

<211> 860

<212> DNA

<213> Homo sapiens

<400> 4217

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<210> 4218

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4218

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<210> 4219

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4219

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<210> 4220

<211> 829

<212> DNA

<213> Homo sapiens

<400> 4220

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<210> 4221

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4221

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<210> 4222

<211> 745

<212> DNA

<213> Homo sapiens

<400> 4222

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accactgaag tcatcaggaa gtgtttggga gaatacgtgt ctgtgctgga tgctgttgaa   420
gcaggtcagg cgttgggggt cccttcgttc ttagggcttc tccaccaagc ttctaaatgg   480
ggaatgccaa ctttgtgcca ggcacacact acctgctgag aactgtgga tgaacaaggc   540
gttgaccag ggctcactct gtagaggaag aagaccagag aatggntacc accaagacag   600
tgataagtgc tgcaacaagg ttcaanagct gcacaagaag tcccaaagg tagtggaanc   660
catcaatccg ggggcttaag gaaagaagct tttaaanggg aagattaaag ccancaaggt   720
gacnccaaaa aactggggta attcn                                           745

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<210> 4223

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4223

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gagaaaaaaa aaagaaaaaa aaccatatgt gtattagggt gactgagtgg tgacttcatt   60
tataataata cagagaatag ctataagctc attgacagta aaaacaacaa accaggattc   120
tactgtttga aaagaagttt cgttttaatt ttggaattta gaatgtgtat ttgcaaagtc   180
accaattttc atctaaaagg ttatattcta gttgtgtcac caaaccatca aaaaacctta   240
aaaaagaagt aacttgcttt gtaggtttgt attgttgatc taaacctgat acatgcttca   300
tttaatcagg aataatcctt ttttttctgc tggacatgta taaatttcac tggattgtat   360

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aaatTTTTat ctattgcctt aaacattttac atgatttctca atatgtttta gctgtacagt 420
 tttggtgttc atcttagagg attcttcagc agaagtgata tttctttact gttttgtgag 480
 gtaatactga ttttgaaaat atatataagc taaaaacagt atttcgttga tatcagtagt 540
 cattgggtta actataaagt caagtgccag caaagaactt taaaactgta aagctgtgta 600
 tagaactgtt ttgtgtagca tggaaataat ctgtcagctt tttaaagtca ctaaagtgtc 660
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 antgggctca tgccctgtaa ncccaagcaa ccccggggtc taaggtgggg aaggattgct 780
 tcaagcccaa ggagttttgn gaacaanccc ttggggcaac aatanncaaa aacccccaac 840
 ccctacnaa 849

<210> 4224

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4224

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 tgtggcccggtt attcatttgc tacagatccc tctaaacaaa caaccgtcag cgttagcttc 180
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 gacttttctc ctgatgttgg atataatggc tacacgaggg aggcctactt tagtgtcggc 360
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 gatgaagtag ttgagaaagg atttgaagat gatcgaattg aggccttact tcataaaatt 480
 gaaatacaga tgaaacatca agtctaccaa gctttgggct gatgctgaca tcatacatag 540
 cttcttgctg gaacatgat ggggaccctg tggagctctt gaagttggga aatcagttag 600
 ctaaattcag acagtgcctg caggaaaatc caaaaatttt gcaagaaaaa agtaaaacag 660
 tatTTTaagg aataaccagc ataagctgac tttatcgatg anggcaaatg acaagtnnca 720
 cgaggaagca ngcacaaggt ggaagccacg aagctcaagc aanaagggcc aagg 774

<210> 4225

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4225

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atttttagta gagatgaggg ttcacatgt tggtcaggct ggtctcgagc tcctgacctc   60
gtgatccctt caccctggcc ttccaaagcg ctgggattac aggcgtgagc taccgcatac  120
ggccgatctc aagtaatttt tttttttttt ttttaagagac ggagtctcgc tgtgtcgccc  180
aggctggagt gcggtggcgc gatcttggct cactgcaagc tccgcctccc gggttcacgc  240
cattctcctg cctcagcttc ctgagtagcc cacgctgggc taatttttgt attttttagta  300
gagatggggg ttcaccgtgt tagccaggat ggtctcgatc tcctgacctg gtgatctgcc  360
cgcctcggcc tcccaaagtg ctgggattta ctggtgtgag ccattgcgcc tggccacctt  420
tccccagctt tcttaagtca ctgcgcanag gtgagaggaa aaaggaaaag tgatacccaa  480
aataaaaggg cataagtata ctcatatgat tattgtatcg caggtggcat tgcctttang  540
ttcttgttta attttttaaa actgagataa cttgttaatc ataatatagt acagcttgta  600
cttgtgacct gaatttactt aggggtgctga acngtaatta acctganggg ggccaatgtc  660
atccaatcan taatgggttg gnaagagaga acaagnccta agctccggaa atgtggacca  720
a                                                                    721

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<210> 4226

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4226

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gtaagtcctc cgcctcgca tgatggctgc ggtgccgccg ggcttgagc cgtggaaccg   60
tgtgagaatc cctaaggcgg ggaaccgcag cgcagtgaca gtgcagaacc ccggcgcggc  120

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ccttgacctt tgcattgcag ctgtaattaa agaatgccat ctcgtcatac tgtcgtgtaa 180
 gagccaaacc ttagatgcag aaacagatgt gttatgtgca gtcctttaca gcaatcacia 240
 cagaatgggc cgccacaaac cccatttggc cctcaaacag gttgagcaat gtttaaagcg 300
 tttgaaaaac atgaatttgg agggctcaat tcaagacctg tttgagttgt tttcttccaa 360
 tgaaaatcag cccttaacta ccaaagtatg tgttgteccc agtcagccag tgggtggagtt 420
 ggtgttgatg aagggttttg gagcctgcaa gttgttgctc cgcttggttg actgctgctg 480
 caaaactttt cttttgactg tgaaacatct angtttgcaa gagttcatta ttttaaacct 540
 tgtgatggtt gggctggtga gcaagttatg ggttctctaa aaagggtgtct taaaaagggt 600
 gattttgta natgagcctt tgtttggatt gcttcaagan gtcnctagga ttcaacaaaa 660
 tgncttactt caaagaattt acctttncct tctga 695

<210> 4227

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4227

attgagaaag agttcaagaa tgactacaaa aaactgtcaa tgcagtcaa agactttgtt 60
 gttggactcc ttgatctgtg cagaaacact gaagaagtcg aggccattct gaatggggat 120
 gttgaaacgc tccagagtgg tgatcacggt cgcccaaadc tcagccgttt aaaacttgcc 180
 attaaatatg aagtaaaaaa attttagct catccaaact gccaacagca acttctctcc 240
 atttggatg agctttctgg ttacgacag cagacaatgg cggtaagtt ccttgtggtc 300
 cttgctgttg ccattggact gcccttctg gctctcattt actggtttgc tccatgcagc 360
 aagatgggga agataatgcg tggaccattc atgaagtttg tagcacacgc agcctccttc 420
 accatttttc tgggactgct agtcatgaat gcagctgaca gatttgaagg cacaaaactc 480
 cticctaatag aaaccagtac agataatgca aaacagctgt tcaggatgaa aacatcctgc 540
 ttctcaagga tggagatgct cattatatcc tgggtaataa gcatgatatg ggctgaatgt 600
 aaagaaatct ggactcaagg cccaangaa tatttgtttg agttgtgna catgcttgat 660
 tttggnatgt tagcaaattt tcgcancatc aattcaatgc naagattcaa 710

<210> 4228

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4228

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gaaaaacaag ctcagcgatg gcgggctcca gaaggcagcg gtctaggcga ggacgcccgg   60
ctggaccagg agaccgcccga gtggctgcgc tgggacaaga attccttaac tttggaggca  120
gtgaaacgac taatagcaga aggtaataaa gaagaactac gaaaatgttt tggggcccga  180
atggagtttg ggacagctgg cctccgagct gctatgggac ctggaatttc tcgtatgaat  240
gacttgacca tcatccagac tacacaggga ttttgcagat acctggaaaa acaattcagt  300
gacttaaagc agaaaggcat cgtgatcagt tttgacgcc gagctcatcc atccagtggg  360
ggtagcagca gaaggtttgc ccgacttgct gcaaccacat ttatcagtca ggggattcct  420
gtgtacctct tttctgatat aacgccaacc cccittgtgc cttcacagt atcacatttg  480
aaactttgtg ctggaatcat ggtaactgca tctcacaatc caaagcagga taatggntat  540
aaggtctatt gggataatgg agctcagatc atttctcctc acgataaagg gatttctcaa  600
gctattgaag aaaatctana accgtggnet caagcttggg acgattcctt aattgatagc  660
agtccaattc tccacaatcc gagtgttcc aatcaataaa tggcctactt tgaagacctt  720
aaaaaagttc cggtttccac aaggggagcgt tnaacanggg agacaaaang gggaaatttt  780
tgttgcaaaa cctcctgtcc aaaggggggt ggggtccaaa anctttgn   828

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<210> 4229

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4229

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 ttcacaggtc ctacctatac tcaaaagggtg gtaggttata cagggtggat atagtgttga 180
 aagaaggaat gaatgaaatg aatgaattct gatagctgga agcacagcaa ctagcttttt 240
 ttgtagcatg agtgagagaa ggtattgagt tccttattga agaatgcagt tgcaacagtt 300
 tatcactagt gagctgcttc ttggtaacta taagacataa gcagacaaga aacagcaaga 360
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 gtggtttcaa gaagttctcc ccaccctcca gactgctgtc atttacaatt gctagagaac 480
 aagagctggg agcctctcct tggttctgct cctgtggcat agccatgggg gatgcagaag 540
 ggcantgggtg cccactaaag ggaatccccg tcagctttgg ntttaagttt ccagagattg 600
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<210> 4230

<211> 377

<212> DNA

<213> Homo sapiens

<400> 4230

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 ggagttgttc tgaggaaacc agtagattgg atgactgact ggagaatcca gaataacaaa 180
 tccattatcc agacatgttt acttttataat taagaagttt gttgattagg tcttaatttt 240
 caaatgcaaa caccaagctt tgaaaatatt gcatatacaa tgtattggnc accaatttaa 300
 taatatTTAA tttgaagtta attactgtta atccttctan aaaagttttt tttcttttaa 360
 taaaagtaca tanatat 377

<210> 4231

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4231

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gtgcgcctgc gcgcggcgcc gaggggacgg ggtccgactc agaaatggcg gcctccatgt 60
tctacggcag gctagtggcc gtggccaccc ttcggaacca ccggcctcgg acggcccagc 120
gggctgctgc tcaggttctg ggaagttctg gattgtttta tgaccatgga ctccaagtac 180
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ttgccaaaaa attaggttca aaagatgtcg tgataaaggc acaggtttta gctggtggta 360
gaggaaaagg aacatttgaa agtggcctca aaggaggagt gaagatagtt ttctctccag 420
aagaagcaaa agctgtttct tcacaaatga ttgggaaaaa attgtttacc aagcaaacgg 480
gagaaaaggg cagaatatgc aatcaagtat tggctcgtga gcgaaaatat cccaagagag 540
aatactactt tgcaataaca atgggaaagg tcatttcaag gtcctgtatt aatangaagt 600
tcacatgggg gtgtcaacat tgaagatgtt gctgctgaaa actcctgaag cagttaattn 660
aaggaaccta attgatattt gaaagaaagg catccaaaaa gggaacaaag ctccctccanc 720
cttgcacaa gaaattggga attccaacc ctaataattg tgggaatcaa caannaagna 780
aaacaatggg ncaaagcttt t 801
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<210> 4232

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4232

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ggattatttt ttcccctttg gaataacttt tgtgaattat tataatgcag tttccctagt 60
aatatagtagc ttttcatttg aaccacatct tgactgatct gtattgtaat atatgtcagc 120
aggtaagggt gcctgctgga tcattttgag gacagaggca tgaggagca catctcttgt 180
gaagttgcag ccagatttgt aaccaaccct gaaattcatc agcttaattc atttatcagc 240
ttgattcatt catcattcat tgcttatatc caaagcaaag acggtaagaa aatgaattca 300
tcctgaaata taaagaaaag ggtctgaagg aacaaacacg attctcttat attttggggc 360
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tcattgagcct tgatagacag tttcctctcg tcttcatttc caccctcat cctcagtagt 420
ctcctctccc ccacgcccc a ncccaacttc ccccccaagc ttgagttaa gacagaatag 480
ctaaagacag tgctgccttt acaatgcagt aattgccatc tttggggccg aaagacaagc 540
tctgtgttgt gcttttcttg accaaccctt atcctgggct ctggagcttg tgtttccctg 600
ctggcgactg taccttgggt aattgggtgct acctccctg tttgctcant angaccctgg 660
tccnggnngg caatt 675

<210> 4233

<211> 594

<212> DNA

<213> Homo sapiens

<400> 4233

aacagtctgg gagcaaagag tttactcgcc actgggtant gggccatgga caccctcagtc 60
tccaccagaa gttcgggatt gcaaaatggg actctggcag caaatttcaa actgtatgcc 120
agacctggcc ctttgcagtg atataaaatt tttcttgagg tgtctggaaa gatggctgaa 180
taggaacagc tctgctctgc agctcccagc gagatcaacg cagaaggaga taatttctgc 240
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ggaactccct cccctagcca aggggaagctg tgagggactg tgccgtgagg aacggggcat 420
tccggcacag atactatgct ttccccacgg tctttgcaac ccacagacca aggagattcc 480
cttgggtgcc tgcaccacca agggccctgg gtttcaagca aaaanctggg cagccatttg 540
ggcaaacact ganctagcag caggaggttt tttcatacc ctaagtancc ccta 594

<210> 4234

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4234

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tgctcttttg agcagctttg catgacacgc tctggtaaaa ggtgtgcatc tttaaattat 180
ttcatggata ctttgaaaaa tattgtatca ctccaatac agcaataagt ttatatgttc 240
tcaagatttc atttgttttt aagaatttta agttcgtgga ttaatatcac tacttgaata 300
ctgacagttg ttgattagac accgaaaggt tactgattgt tgaatgtatc tgtgttagag 360
ctgtgcaactg gcacgcttgc atcangggct ggggccacac ggccgccaca cagattcccc 420
cgtgatgcct ggagctgctt ccanagccgg gtgtctccaa gaggcacctg taggacttcc 480
catttaagaa atctcttgag tgggtttgta ngttaccttc tccaaggntt atttaggaca 540
nagatattgc tgggaaggtc atgggtcaaa ttccctcaca acccaactcg tctgcgggtg 600
caancccant ccaaggn 617

<210> 4235

<211> 613

<212> DNA

<213> Homo sapiens

<400> 4235

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gagagggcac ggcctcatct gtgaggggcg gccagtgaacg tcacggctgg ctgtcatctg 120
tggaacgtct tcttgtcaca tggggatcag caaagaccg atttttgtac caggcgtctg 180
ggggccttat ttctcagcca tggtagctgg gttctggctg aatgaagggtg gtcagagcgt 240
tactggaaaa ttgatagacc acatggtaca aggccatgct gcttttccag aactacaagt 300
aaaggccaca gccagatgcc agagtatata tgcatatttg aacagtcacc tggatctgat 360
taagaaggct cagcctgtgg gtttccttac tgttgattta catgtttggc cagatttcca 420
tggcaaccgg tctcccttag cagatctgac actaaagggc atggtcaccg gattgaaact 480
gtctcaggac cttgatgac ttgccattct ctacctggcc acagtccaag ccattgcttt 540
ggggactcgc ttcantatag aagccatgga ngcancaagg gcactcaatc agtactcntt 600

tcctangtgg agg

613

<210> 4236

<211> 892

<212> DNA

<213> Homo sapiens

<400> 4236

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aagtttttgt tattgttggt caaaacatca tttttaagac ccgaggctct agtgctgcat 180
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ccatttataa ctttagtaat atacaatgtg acttttttta gtatccttgc tagtattggg 420
cattgtcatt gttttaatct ttgccaatct gatagttata agtgatactc atttaaattt 480
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cattgggtgtt gattactggg tattgggtggc tcagacgtag gatgatggac tgttggcatg 600
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atcctggggc ccaagccagt tncatatgca tatnatatga atgacaaatg gaaaatgggt 780
aagacagcat gtancctggt cccctaataa aggggtactcc tangggcaaa agaccttgnt 840
tttggaataa ttttggaatt acnaaatttt tagncctaaa taacaacaaa aa 892

<210> 4237

<211> 712

<212> DNA

<213> Homo sapiens

<400> 4237

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 cccatttct tctgagaagg acagagccaa tctactcctc ctgggttatg ctcaaggaag 180
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 ggctgacagc tgcattctatg aatgcattcg gaataaaatc cagtgtgtgt cagtcaccag 360
 aataccacta aagtcaaagg ccatcagctg ctgcaggaat gttactgaag acaaactgat 420
 tctgggctgt gaagattctt cgctaattct ttatgaaact caccgtagag tgactctctt 480
 agcacagact gaacttttgc cttcantaat aagctgccac ccaagtgggtg ccattctgct 540
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 tccaactgtt ggctgaaaga ccgcttacc angggaggaa tcttgcaaat tcaattaaan 660
 nttattttgg ntccctccaa gcaagttcct tgttcaaat gcaaatgggg gn 712

<210> 4238

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4238

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 tcaggtggat tatacctttg accggaatgt gttatccagg ctgttaaag aatgcagaga 480
 gatgctgcac caaatcattc agcgccacct cactgccaaag tcacatggac ggggttaataa 540

tgtgtttgat catttttcag attgtgaatt tttggctgcc ttgtataatc cttttgggaa 600
 ttttaaacc cacttacaaa aactaagtga tggatcaac aaaattgttt ggatgaagag 660
 aacatattag cacatgagtt aagantgggtg accngatcat ggatttaatt tgaagatggn 720
 gcactgctgg attttatgaa gggaaaaaag gaagaatttt cctaaagnat tacacaatat 780
 ttcaanaaan ggcttttacc caanttcaat ttgtca 816

<210> 4239

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4239

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 agacaaccac agaaagtgtt gttttgtca cattctactg ctactgtgtc aatggcagca 180
 ttttgatata ggtggaggga tgctcacatc aaccccataa tttgtgtcag cttctcctga 240
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 aaggtaaate tcctcagatc ccttccagta catgtatgct ccaaggcctg ctctatgtag 360
 aacttttgga gccatcaacg tactgcttga ggttgctttg aacaaaaggt atttgacata 420
 agctctataa gatcaggac tcttttttan tttattcatt gttctttatc ttctagagca 480
 ataatttgca aaatgactat ttattgaata aactaggacg gangtgaaaa ggaaagaaca 540
 agctcatcct tccaagggga agagagcagt atcccaaate caaattgaag aaaatanaca 600
 tatatctatt caccangaag agatanaagg gaagacaggg cagaatttct gtgggtctta 660
 caaactcngc acntcta 677

<210> 4240

<211> 561

<212> DNA

<213> Homo sapiens

<400> 4240

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 cgccgcactg cccacttggg agatggcggc gcgccgcagc ctcagcgctc gcggccgggg 240
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 tgcgggcggc tgcgcagcgg tgggcgagaa tgaggagacg gtgatcatcg ggctgcgact 360
 ggaggacacg aacgacgtgt cgttcatgga agggggggcg ctgcnggtga gcgaacggac 420
 ccgggtcaag ctgcggggtg tacggggcaa naacatcaat naacgaagac gtttgtccn 480
 gcatcgctt taaccgaagc acgaagccgg cgggcgcaa caagcccggg gggganccgc 540
 ggggcctggg ggggncccn n 561

<210> 4241

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4241

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 aagtttctgc ggcaactgaaa caaggccaaa ttacaccaac agagctctgt caaaaatgtc 180
 tctctcttat caagaagacc aagtttctaa atgcctacat tactgtgtca gaagaggtgg 240
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 gttgttgat caggagctc tactaatggg aaaaacaaat ttaagatgag tttgctatgg 480
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ctggataact gggaggggaag ctcaaggtgg gaantgcaac tggctggtat ccnggggttc 660
aaaatgctaa cccgggcttt tagggattaa ggttncaggg nggggnt 707

<210> 4242

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4242

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cctggagaaa gaaaggctaa tatttatttt actcaaagaa gagctccatc tacaggcatt 180
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ggaaagntct tgtttgctag accgtaaagg gaacnaaaaa agggggattc tgccaaggaa 600
aatggggaat ggnttcatga gtctaaggaa gganntatca gagtatggng gaaacacacc 660
aaactacctg 670

<210> 4243

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4243

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gccctcgctt tcttgacatt ccctggcttc tgtgctctct tccccaggcc accccagcag 120
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 gaaagcttcg agctgatgtg acaactgctt tccccaccct tggaactgat caagtctctg 240
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 gcctgaaagg gaaaggggct tctctgtgct ccacacttan caaggaccac ttgtggcggt 660
 ctggaacaaa gtcctctcca ccttccattg ctccactggg ncctnggatt cagcanatnt 720
 caagtgaag 729

<210> 4244

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4244

aaaaaaaaa aatttccaca ngatgctggt cctcagtgga ttaggtcaga agctcatgtt 60
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 gtcagcagaa tctaaacccc tacattaaag ctttgcctcc cattctgtgg ttgtggtggt 180
 ggtaagaagg agatattggt accaagaaaa atttccaaaa ctattgagag agagagagag 240
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 tattccttgt tcttaccaag tgtacattta actcttgctg acatgttcag tgtatittat 360
 tacttttaat gctgtcttaa aatgaacatt ctttaaagtt ggacaggaag gtggcatttc 420
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aaaaatcagt atatatttta actttttgtg acatgctaac acattttcag aataattatt 660
gcatagtaga atttattact ccaagaanag aanngacctt acntcaattc aaatgaaggt 720
taagtaattt acatttcctg gggtataaaaa ccgggntcta taaaattaaa gttagaag 778

<210> 4245

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4245

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tgctacctga aactagaaac acatttttaa ttctgcagct ctcctaacag attattttgc 180
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attgattagg attatttcaa gggatggttg agttgtcgtt ttacttattt cacccaatat 360
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aattaaattt tatatttaac tgatacccaa gcatttgatg aaaacatgtt gcaggaatgg 480
gagagtattc catagctttt gttttattgt gatttgatta aatgtgacaa ctaataagtt 540
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ggaaagaaat gtcttcttac tagaactgga ttttgggggg actttatcca actcttactt 660
ggggacacta actggttggc tataaagggt caaaaaaggg agccaacaag ttgcctaatt 720
tgggnaatgt ttgaaaataa tcaacngggc taatttttaa gaggtatnga agccaaacct 780
tttancnaa 789

<210> 4246

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4246

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gatttctaga ggggtcccaga acgggttctt cccaggccga tcccgcctgc ttcctgcccc 120
gtctctccac ccgcctcccg ccctctgtaa gggaccccga gggcggcgcc gga[^]aacacgg 180
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agaaatgact ttcagctgtg caaggcgaga atgctacttt agataatgag aaaaaatctc 360
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gctgatacca aagangaggc caagaagcgg actgtggctt gntgacctgt ttggtattgc 480
caaattttca gcttttatta aagctgaaac accttgnct gtttaaaacg ttcgacaagg 540
acttttttat gaacgttaac ggcacannat acgggttttt tggaaaaaaa aaaaggcang 600
antcaacc gttcggcccc ttgtgaagg tccattcatg aaaccctcga ngttaaaagg 660
cc 662

<210> 4247

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4247

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cctttcctgc aagcaaacta aataaattgg agcaattgga ggaactgaac ctaagtggca 120
acaagcttaa aaccattccc acaaccatag caaactgtaa aaggctgcac acccttgttg 180
cacactccaa caacatcagc attttcccag aaatactgca gttgcctcag atccagtttg 240
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tacaagacct tgacctgact ggaaatacaa atctggttct ggaacacaag aacttgaca 360
tatttagcca tatcacaacc ctgaaaattg atcagaaacc tttgccaacc acagattcta 420
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tgtgtgtctc agcacttgct atggatagct ttgcaagagg ggggtggganc tgtgtatggc 540
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gtgcttttag aagaggtaca gcaagtcaac taatgacaca gnttttcaaa gggtaaacac 660
cttctttggg aatcccacaa gggnaatttt nggaatggct ggggccaaaa aatttggggc 720
gccccccggt ccccccgggg ncnaaaatcc cggccccggn 760

<210> 4248

<211> 630

<212> DNA

<213> Homo sapiens

<400> 4248

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cagatccaga aagatggctg ccaatgagag aacgtttcta ctaccgggga agaaagaagg 120
gtaaaaagaa ggatcagatt ggaaaaggga cccagggagc aactgcagga gcttcacatg 180
aactggatgc cagtaaaact gtgagcagcc caccacctc cccaagacct ggcagtgtgt 240
caacagtatc tgcctctaca agtaacatca tcccccaag acaccagaaa cctgcagggg 300
ctccagcaac anaaaagaaa cagcaacaga aaaagaagaa aggtggaaaa ggtggctggt 360
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gttcttgtgt ttcaaattag ggaaacatct tcctcaaagt ctgcctagtgc agatatggcc 540
tactggttgc ctcatagctt tgtacaagat tacgaggact gaaaataatt gggcatttac 600
ccatcttggg atcngttgng nncctttanc 630

<210> 4249

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4249

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gacagcaaaa tataatatta gcgtggcaaa gagccaggaa aattaaaaga catataaagg	120
gaagagatgg cgaaaagacc ctctagaaat atctaaaaat tcagatgtgt ggacacagaa	180
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ccatccaaaa ttggacaaag gaacaaaaaa atctgccatg tgacaaattt aaagtttcca	360
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aaattctttt cattttgttt tggctctgta attaaacact caaagtgtat cagtagctaa	600
aacattactt caatacccac atttattctg gctagaaaat cattccattt tataccatgg	660
agcatccaag ttatttaatt aagaaaattt cccttaagat ttataccana tatgggnaaa	720
ggngtaaang ccaatgttag gggcaaaaca aaatgtctgc tgcggttggt gattttcaatt	780
tgcataat	788

<210> 4250

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4250

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gggagccggc ggnccgggcca cccgccggct ggggagagcc gccccgccn gncgctcatg 480
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 taggggacga ggtgccgggtg gncacggtga ctggagtcgg ggacgttttt caaggcggan 600
 aggcggncgc nacngaa 617

<210> 4251

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4251

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 tttctgaagc aggactgaag gggcccccaa gtgcccaccc cctgcggtta tgtctcctcc 180
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 cctcatgtct gccctgagcg cgggggtggaa atgctccctt ctgtgggctc cancagatcc 540
 cttgttttcc tgtcagtttg acncctcacc tggntccag ggaagantgc aganaaaagc 600
 aaggagagac tctagttaag a 621

<210> 4252

<211> 843

<212> DNA

<213> Homo sapiens

<400> 4252

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ccactataat gtcgtgaaa tgtgcagtat tccatcctta gagagtttat ctggttcatc 120
agcatctgca tgtatcctct gaataatgaa gcaacatttc agcaattctg ttaaccacac 180
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gaa 843

<210> 4253

<211> 915

<212> DNA

<213> Homo sapiens

<400> 4253

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cagaaaagat cacactagct caccagcaat ggatccaaac aaagaatata tctctgaatt 120
gccagaaaaa gaattaagaa agtcaattat taagctactc aagaaggcac cagagaaagg 180
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 gaaaaaataa ttttaaaata taaacaaacc ctccaagaag ttggggattg tgttaaata 780
 acaaaactta ggataaatgg ggttcttgag gaggaagag aaagctaaac cgtttgggaa 840
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<210> 4254

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4254

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 taaaactaaa ggtaactgan catgccaant ggttgggggtg agaaaattgc atgngnga 780

ccaagacaca gaggcagcaa aaacccaagt gctgggaant caagagtgan aaaagt 836

<210> 4255

<211> 539

<212> DNA

<213> Homo sapiens

<400> 4255

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 cataatttga attaatatta attataccaa gttggnaaca ttgaaggaca catacagtgt 180
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 tccagcaagc tttgagtgtc tctgtaaagt gagcaaaaac atatcagtat acatnnctat 480
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<210> 4256

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4256

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 gatttcgaat cgcatgatc atcccctctc tagaggagct ggactccctc aagtacagtg 120
 acctgcagaa cttagccaag agtctgggtc tccgggccaa cctgagggca accaagttgt 180
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 tggagtccat tgatcaatat attgagagaa aaaagaaaca ttttgaagaa cacaattcca 720
 tgaatgaact gaagcaaccc atcaataagg gaaggggtca ggactccaag tacctccaaa 780
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<210> 4257

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4257

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 aaaaatggtn cagtttttaa gaattttcta ttaaccngca gggtaataat tagctnctatg 720
 ctgcaagact ccaacaaaag cctaagttca actggaaagc ccaaagtcn aattttaang 780

ggntttaat

789

<210> 4258

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4258

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 atttactccc attttgatta tattaagaaa gtatgtgagg gcatgagcct ctcaggaggg 180
 gacctcagtg tttccggatc cctcctgccc tctgtgggac ctagatgctg gctagctgag 240
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 tccagtgtga tgacatggct tggtcacccat gcttcgtgtt tgctaaaaag aaaccaggga 360
 tatgagtttc tgaattctca acctggtgcc ttgtccagag aacaaagtca ggtaaatcag 420
 acgtcttccc ctctccagcc caactcattc gctggctgac ctctcntggn cccatgggtc 480
 taagaacccat ctccacgata atgattccca antgaatata ctanccaga cctctccctc 540
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 catctaagtc nancaacaag attccaacct ccaagnctgc tcaagccctt gcctcctgcn 660
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 gaaantcaan cctttgn 737

<210> 4259

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4259

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 acgaaacaca agaaacaaca gaagggtgcc tgttaaataat gaatttctgg taagcaataa 180
 gtaattttta ttgtgttcct gtgcaatgat aggacgcacg tatcctgaaa acctgtctgt 240
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 gagctgcagg ccctacaact tggggttggg caaggatgag tcgctctatg gtggtgcctc 480
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 aagcctactt ggggtgaaaat agctttccaa ggagccacat tgtggggacn ttnagggaac 600
 agccccacac tttggggncn cttggctgtc tccaactcat cctcacttnc caaggctgga 660
 caaaggngat taaaaagaaa atgccaaagg ggggttgggca aggcaagaac cctgtttggc 720
 ntttгнаagg ngct 734

<210> 4260

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4260

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 ttaaaagagg ctctttggaa gtatatacat tattaacata atgtgtacaa gtccttttga 180
 aatgacaact ttaatgggtt tcagctcttt tatctagagc ttgagataat tcaagctgag 240
 tttttcaggg catatcaca cggcaaagtg ttcagcagtg ggatatcaat gcttattttac 300
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 cattaaagca cagatcatta agcaataaaa accaaattgt ctgtcattca aattataact 420
 gcagttattt ttgcatggta agagtgagg gctaattttg tgtgagatga actttgtaaa 480
 ctactttggg aaatgttctt tggaagtaag gttttttctc ctttagtctt atgcttccac 540
 ttttgtctca agattcaca tccattaana catggggaaa aaagaaaagg taaaattgag 600

agacttttgt tagaggagct atttggatga accaacattt cagattttcc aaaatgtaag 660
ttaggaagct ccaatggccc ctgcattaac aaaatacact gttacnacct aatcccaaga 720
gtgtcattac agtgagaatc cncanttaaa ngcattccag tggaaattat aanaat 776

<210> 4261

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4261

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ctccataccc cctaaaaatc aaatgatgta tttttttcca tgaaatgcct tttggtgtgg 180
tttatgtgca tgactgattc ttagaaaagcc aataagatag ggggtggagcc aagatggccg 240
aataggaaca gctccagtct aaagctccca gcgtgagcga cgcagaagac gaaagatttc 300
tgcattttcca gctgaggtac cgggttcac tcactgcgga ttgtcagaca gtgggtgcag 360
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caggggaattc cctttcctag ccaaggaaaag ggggtgacaga tggcacctgg aaagtcaggt 480
cactcccaac ctaatactgt gctttttccaa cggtcttagc aaacggcaca ccaggagatt 540
gtatcctgca cctggcttgg agggctcctat gcccatggag cctagctcat tgctagcaca 600
gcagtctgag atcaaaactgc aaggcagcaa gaggctgggg gaagggcgcc cgccattgcc 660
caangcttga gttaggtaaa caaagtggcc gggaaactcn aactgggtgg agtccaccgc 720
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<210> 4262

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4262

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 ctccagtcct tctctttcgt cagtataaaa gattaaactc tacagaagaa tgcaatcaag 180
 tgatggcttt tccttttagaa tttgaatatg gaggtctacag gaacagatga agttgacaag 240
 ctaaaaacca aatttatatc tgcttggaac aacatgaaat atagttgggt gttgaaaaca 300
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 tatgaagacg aagataaaac gttacctgca gagtcgggat gtacaataga ggatcacgta 420
 attgcaggaa atgtagaaga atttcgtaaa gatttcattt ctagaatatg gctgacctac 480
 aggaagaat tccctcaa atagaaggctca gctttgacaa cagactgtgg gtggggctgc 540
 acattgagaa ctggccagat gctcttgggc tcaaggactc atactacact ttcttgggnag 600
 agcntgggac ctggccctga tgccttggn aatgaaaat tcaaactctg aatcaaggga 660
 cttccanac tggtaaaaaa attttaacng caacaatttn gaagncatcc actttcaagg 720
 gggaaaagaa gaaattccaa aaacccccaa acaaannttc c 761

<210> 4263

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4263

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 atcctgaggg atttggttgg tattgttttt gggttttctt cttgaaactc agtattaaaa 180
 cactgaaaag tancagattt ttttctacct agagttttct gtttatccat catgagccca 240
 aataaagtca caattgtatg ttacctgctt tacaagaag ccatttatgt ttaattgact 300
 gttcattttg ctttcttgtc tgctgggatg acaaccgtga aattcagtct ggtagttttt 360
 atgagttgga catgaacctt ttagaaatga tttaaagtat aaaatcattt ctcacagggc 420

tttcaaaaca tanacctgtg atcagaaacc tggaatctag aaatttattc angacttgca 480
 agaatttgta gcatacttac attattggag atctattgaa agggcaagaa aaagatgatt 540
 gcccgttagt atcaacagtt atggtacagn caactatgag agaaaccttt tagatttggc 600
 agctgtatca ttaataangt gtcattgggc caattcnaan attacagtaa tcnaaaaatg 660
 gg 662

<210> 4264

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4264

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 ggctgatata agctatcctg tccgaaaatc catccagcag gacgtcttag ggaccaggct 180
 tcctcaactg agcaagggga gccccgagga gcccggtgtg gggtgcccc tggggcagag 240
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 gaagctggtg gagtacattg tgaaggccaa gggcgcgagg agccacctgc gggccatcct 360
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 ctgtgtggag acctacctgg aggatgangg gcagctggac ctggtggtga agtacctgca 480
 nggcgtctac cangagggtg gggccaaggt gctccagcgc accaacggcg accggatccg 540
 gttcattctg gacgtgcttc tgcccagggc catcatctgt gcgatctctg cggtggacca 600
 ggtggactac aaagacggct ganggagaag tacatcaagg ggccttcgct gagctaccgg 660
 ggaaaaagaa atatttgaca aaccaagctc cttttaaaaa ncgggaacn gggngnccgt 720
 tccggtgaag gganc 735

<210> 4265

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4265

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 cctgcttcaa tcttcaactg ctggaaaatt caattatata ttattggatc gatatgtttg 180
 ctacactata acccagaaca ttatgaaaac cagaaattat aattttatat ttaatatatt 240
 ctaacggatg actctagggg aattgttaga ggaattgtca tgaccattgt ccagtttttt 300
 tcctagattg gaacagagaa gtattaagaa gaaaactgaa attatctgta atgccacatc 360
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 tttctatacg tagattaata agatatacat atctatcttt ttaaagttaa aaagggatta 480
 tattgtatag agggttttat atcttgcttt ttctctgtga tgctgggagc atttccttgt 540
 aatgaaaagt tttcctaaaa ccacattcta ttgagtgaac acataagcca aggatggcgc 600
 atacttgccg atgagagtcn aggccatctg tgacgatatg antggctcgt ttctttgcac 660
 ctctctgttt acgtcagggc tattgaaaaa aggattgtnt taanggtaaa acgccggcna 720
 aangggaa 728

<210> 4266

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4266

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 agagcacttg tagccatgaa tgaaaatctg aaaagtcaag aacaggaatt taaagcacat 180
 tgtcgagagg agatgacacg actacagcaa gaaattgaaa acctgaaagc tgagagagca 240
 ccacgtggag atgaaaagac cctctccagt ggagagccgc ctggtacatt gacctctgca 300
 atgactcatg acgaagacct agacagacgg tataatatgg agaaagagaa actttacaag 360

atacgtttac tacaggctcg aagaaatcga gaaatagcaa ttttgcaccg caagattgat 420
gaagtcacct gacgtgccga gctaatacag tatcagaaga gatttattga accctaccgc 480
cagatttcag cagtgcacaa agaaaccaag cagttcttca ctttatataa taccctggat 540
gataaaaagg ttatttggaa aaagagatta gtctgctgaa ctcaattcat gagaacttct 600
cacaggccat gggctccccct gctgcccggg accagttttt acgtcagatg ggaacagatt 660
gtgggaaggg gattaagcan agnnnaatgg aagatgggaa angaaaaagc aagg 714

<210> 4267

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4267

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gctttgctcc ttgttttttc cccggttctg ttttctcccc ttctccggaa ggcttgtcaa 180
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tgccaacaac cctgttttcc gttacccgac tcctggggag gctcccggag ttgttggaaa 600
ctttaacaaa tccattgttg gctcgcctgt tctcaaatgc tcggagggt tctttttata 660
caagccaaga aaagacacca ngcatgnaag ggacaatgcg gcaaaagttt ctgangaaac 720
atttncaagc aanatt 736

<210> 4268

<211> 766

<212> DNA

<213> Homo sapiens

<400> 4268

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ggaattttta ggtggtcaca ttgtaaggca tgcccaggct catcagaaaa aaggcagttt   60
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gaatcatggtt aagaagatac agaggcagca aattgctgca gctcaacagg atgatcagga  180
agtcactgct ttggaagaaa taaattgttc tagttcttcc atttcatttg aaaatgggaa  240
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agtcattccct gagcatgtgg ctgaattcat tgaaattccc ataagtgtac cagaagatgt  360
tattgaaaat gttattgaaa atggcagtcc taataattct ttaaataatg ttttcaagcc  420
tttaactgaa tgtggggatg attatgagga ggaagaggat gaanaagggtg attatganga  480
agatgantat gacctgaatc aagaaacttc agtaattcat aaaatcaatg gaactgtgtg  540
ccatccanaa gacatatatg ccacagatca agaangaaac ttaagtgtc ctgctcntgg  600
ttgtgtccgg atattttaaa gaattgggtt tccaaaataa acatgcaatg acccgtagat  660
ccaaccgatt taaatgtggc gacaaacagt atgaactggg caaaggaaat gcaaattttg  720
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<210> 4269

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4269

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attccagtgc caattttgtg ataagtgcta tagttggaag aaagattggt attcccatgt  120
gaagtctcat tctgtcactg agccttatag gtgtaatata tgtggcaaag aattttatga  180
aaaagctttg ttcagaaggc atgtaaagaa agctacccat gggaagaaag gaagagcaaa  240
gcaaaacctg gaacgggtgt gtgaaaaatg tggaagaaaa ttcactcagc taagagagta  300

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taggagacac atgaacaacc atgaaggagt taagccatit gagtgcttaa catgtggagt 360
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 ctatgtctgt cctgtatgta gcgaagccta catagatgct cgaacactcc gtaaacadat 480
 gactaaattc cacagagact atgtgccttg caaaattatg ctgggnaaaa agacancctt 540
 cagtttcaaa ancaaaggga ctcaagtggg cacatgctgt taacatctta acancaaggc 600
 atgcaggaac aagganaagc aagtgggcct caaggaactt gangactggg gggaagtgc 660
 aaggagaaaa ctattgggaa agcctccggg aaanctgggt ngcangctaa ctggaaagag 720
 gtttnccaa 729

<210> 4270

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4270

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 gaagaaaagt ggaaactttg atctgctgtt gtgtgtagga aatttctttg gctccacca 180
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 gattgtgtac ctcatgtgga cagaatcctt aaatgagcca gtaccagggt atagtitttag 420
 tccaaggat gtgtcttctc tgagaatgat gctgtgtaca acctcccagt ttaagggtgt 480
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 gagaagtgga taccaaaaaa tgtggncttg ctttggnttc cagtcttgcc acgggcttga 600
 aaccaagata ccattttgct gctttgggaa agacctatta agangaggct tccaatatcc 660
 gaaaccatat cattcctaca ggaaaatgga nagcaatgnc anccgggttt aaanctcctg 720
 gaaaagggtg ggaaatccca g 741

<210> 4271

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4271

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acagatgatt cctattcctg ccactgcctg aaaggcttta ccctgaatcc agataagaaa  120
cctgcagaag gatcaactac tgtgcactga acaaaccggg ctgtgagcat gagtgcgtca  180
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tcatgacctg ctcccgggtg gattactgcc tgctgagtga ccatggttgt gaatactcct  420
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tgaagatggg aaaacctgca gaaggaaaga tgtctgccaa agntattaga ccatgggggtg  660
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tcc                                                                    723
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<210> 4272

<211> 749

<212> DNA

<213> Homo sapiens

<400> 4272

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ttttgactta taaacaatgc tgcaatgaaa taattgacat atttccttgt gtacatgtga   60
gcatttcttg agatatgtat ctagaacttg aatcactggc caacaggata ttcttaatct  120
tcagtttcac cagatacttc caaattgatc tccataacat gcataccaaa ttatattcct  180
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accagccatt tataggagtt cacatTTTTT ccataccctc ccaatcctgc cttggcagat 240
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 attcatctgg aagaaaagca agtataagta agaaatttaa aagggacctg aaaaactaag 360
 caatggatat atttaaaaaat tgggtaccagt agggataacc aaatatttgt taactgtagc 420
 aagaaacaat gcatgtTTTT ctcactgggt ccaccttcta tctctcagtc aagccctgcc 480
 caggtgtggg aagtcctcat agtctctcac tgtaggggtc ctctcacata gtaagaccac 540
 tctcttggag ttgaatatgt gaaaagaang cttggncggg ggcaatggct catgcctgtg 600
 gtcccagcac tttggggaag ctgagtcgan cgggattgcn tgagggcagc agttcgagan 660
 cagcctggac taacatgggn gatgaaagta caaaattaac tggggggtgg tngggcaagg 720
 cctgcaatcc cagntacccg ggaaggntg 749

<210> 4273

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4273

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 aaaataagta gggcacatat aaatgtccaa agagacctaa accatTTTTg ctgtttcctg 180
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 aaagaacaag ccaaacaat caaaatttcc atagatttgg gcactgggtg atttgacaag 600
 ctctccact ttttaagttcc taaagatggg ataaaattgg ggaanaaatn cagattggcc 660
 ttccccaaan ggaangtaat angtttcc 688

<210> 4274

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4274

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ccatttgtct gcaaacaatgt gttcatccag tcagtctgcc ctgtaagcac gttttctgct  180
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tancctggact taagctagac tgtgatgcta ataccgtaaa cctagcaaga gagagctctg  600
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gatgcaagca cttctctgga agactccttt gencatttac aactcantgg nggacaacac  780
agctgaaaag ggtcataagg gagaaagggg aagnan                               816

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<210> 4275

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4275

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aatacaagta ttagacccc atctgcacct tcgtcttctc catcctggtc ctggggacaa   60

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ccttgaccat cctgagagat gtgacccctgg tgttgatgga agggaccccc aagggcgttg 120
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 tgctcttcca gctcctgggc cagctctgga agggctgtat ttgggcctaa tcctcaacaa 660
 ctgttctacc actcgcaggg gcaaangtgg tnaagccacg gnacntcaan gggggaaggc 720
 tgggccccaa cg 732

<210> 4276

<211> 558

<212> DNA

<213> Homo sapiens

<400> 4276

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 ttgccaagta ctgtcccagt tttagcactg aaagtccac atctcaggaa acccttcagt 180
 cctgcgtaag caaggacaac tggtagcccc agatcgaagc tgtgcaatta ggaaggggac 240
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 gagaantaca gtcatttgct gcaggaatca actcgtcccc tagatatcgg ttcccttatt 360
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 cttacttttg agtttttcat ggttttccca gtcctccccg cccgccncaa caagcttccc 480
 ctctctaant gcaacaggaa ncctcctctt aaagggaang ttccctggnc tctatctcac 540
 tgctcttttc ccagagga 558

<210> 4277

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4277

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gagtaaaacc gccgcccggg agaagactga aggagcagtt gccgccgttg gcggcggccc 60
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tccccgggggt gtaataatgt taactgagtt atattgggag ctagtttcaa gatgaaatac 180
taattctaag ccagtcctatc catatgggga tggggaagcc ttggcattgt cttttttctg 240
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tgtgaacact catttcttcc tccaacatca cctgggggttc ctaagtgctt agaagaaatg 420
aaacgggaag ccaggactat taagattgat agaagattga cgggtgccaa tataattgat 480
gaatctctcc agcaagttat ccagttttcc ttgagggatt atgtccagta ttggtattat 540
acactaagcg atgatgaatc ttttcttctt gaaattaggc agactcttca aaacgcactc 600
attcagtttg ctactangtc aaaagaaata gactgggcaa ccttatittta ctacacgcat 660
tgtagattga ctttggcaca cacttacgag tattcaanaa nggtcaaaca gaaaataacn 720
aggaaangat gatcaaagtg aaaaggtaca nca 753
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<210> 4278

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4278

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gccgcctcct ccttctctcc tcctcctctt cctcctctct cctcgtctcc acagccatgt 120
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ctgcttagac cagagcagcc ccacagccaa ctagggcagc tgccgcccgc acaacagcaa 180
 ggacagccgc tgccgcccgc cgtgagcgat gacaggagtg tttgacagaa ggggtcccan 240
 catccgatcc ggcgacttcc aagctccgtt ccagacgtcc gcagctatgc accatccgtc 300
 tcaggaatcg ccaactttgc ccgagtcttc agctaccgat tctgactact acagccctac 360
 ggggggagcc ccgcacggct actgctctcc tacctcggct tcctatggca aagctctcaa 420
 cccctaccag tatcagtatc acggcgtgaa cggctccgcc gggagctacc cagccaaagc 480
 ttatgccgac tatagtctacg ctagctccta ccaccagtac ggcgggcgctt acaaccgcgt 540
 cncaagcgcc accaaccagc caganaaaga agtgaccgag ccccaggtga gaatggtgaa 600
 tggcaaacca aagaaagttc gttaaaccbaa ggactattta ttccagcttt cagctgggcg 660
 cattacagag aaggttcaca agactcagta cctcgccttg ccgggacgcg ncgagctggc 720
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<210> 4279

<211> 812

<212> DNA

<213> Homo sapiens

<400> 4279

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 cgagggtcatg ccactgcact ccagcatggg caatagagcg agactctgtc cccccggaaa 180
 aaaagaacaa gggctaaatt caaatcaaat tttccctgta ccctaagaaa aataattagg 240
 ccgggagatg tttgactaag tgagtaggca ttgttctgtg acggtctgag ccccagacct 300
 ttcctctgga tgaatgctgt cccaggtaat gaaatgactt cacttattaa tatataggta 360
 cacagagttc aggtagatgt ggaatgaatg gggactcgcc ccgtctgccc ttgaatgtat 420
 ttagtggttt atgtgaaatg tacctttcaa agttgtctgt atgtttcata ctctgggggt 480
 gggaatataa atcattgcag cttttttgta gggcactttg gcagtactca tcaaaatatg 540
 cgatgtgcag atgcttagcc agcaactccg cttctatgaa tctagccaac agaaatactt 600
 gtagaagtgt gcagctataa atgtccacaa gaggtcaga gcctcattgt ttttaatagt 660

gaacagttgg naaccaaata gatgtctgtc agtagggatg tggcagaatt gtggcatgtt 720
 ttatatgggt ataaaaaagt attggangga acataaaccc aactggttgg naagaagtta 780
 acctctggga tncaggnata aggtangggg tt 812

<210> 4280

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4280

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 cagttccggg caaaaacagc acgtcttaaa acttttactg ccaaccagat agatgaaata 180
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 gatgttcaga gacaagtttg ggattacctt tttggaaaag aaatgtatca ggttgatttt 300
 ttagatacta atattattat cactgaacca tactttaact tcacttcaat tcaagaatca 360
 atgaatgaaa ttctatttga agaataccag tttcaagcag tattaagagt aaatgctggg 420
 gctctcagtg cacataggta tttccgagat aatccttccc gaattatgct gtatcattgt 480
 tgatagtgga tattccttta cacatatagt tccttantgt anaagtaaaa agaaaaaaga 540
 agcaattatt cggataaatg tgggaggaaa actcttaacc aatcatctaa aggagatcat 600
 atcttacagg cagctacatg ttatggatga aacacatgtg attaatacaag tgaaagaaga 660
 tgtatgccan ggtgtcccaa ggatttttat agagacatgg atattgcana gttgnaaagg 720
 agaangaaaa ttcaagtaat natagaacta 750

<210> 4281

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4281

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aacaacttta gtacttggct ttgtgtgaaa gaaaacagaa ttcctatgt aatacccaac 60
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tacaattaag agtcctatit ttcactggat ctactagtgt aataaggatg ccatatacta 180
aagcatagaa aagttaaata tccattccct ataaaatcta agaaatacta tgcagtaata 240
tgtcataaat tgccaaataa taatttactg taatacagaa aaagatctgc acctatgtat 300
gaaaagattc tcagaaaact aagaataaag ggaaattcta acttgataca tcctgtgcac 360
ctcaagtcta tagcaaaagt tacatttcat tgagaaattt tgagcacaat ttaagtaaga 420
ggagaagata agaaagaaga aataaagttc actattcgta tatgatatag tcatttgtat 480
aaaatccaaa acagcaaact actagaactg agaaaattca gcaagggttg tctaataata 540
gattaattta taaaaagcag ttgttttttc tataccgaga gatcagcaat cttttttaaa 600
tgttttcagc tttgtgggcc atatggtctc tgcataact ataactgctg atgtagtatg 660
aaagcagctt agacatcatg tcaagacatg ggcaatgcct gtgttccaat aaaagctttc 720
ttttagtaaa atngcaagcc ntgggatttt gggcctgtga gnccataaaa tttctaaacc 780
cccngccaat ttatcaaggg gggaaacccc aacttttigna aaa 823

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<210> 4282

<211> 521

<212> DNA

<213> Homo sapiens

<400> 4282

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tttaattgat gctaaccata gtgatgggag atcnttgctt atacaggaga acataattta 60
ttatcttatt ttaaaataaa cattacacta aaaccccaca tcatttcaag aaatgtgggc 120
aatagtagtt attttattat tatacgtaac ttttaaaaat aacaagatag acaaaatggt 180
tgagctacat gcacatgaaa agtgaaattt acaaaaagct taagaaatgg atccaaaagt 240
atatttaagc acttcctctg aaaccctcat aactaacana atatgaaaaa acaataaatg 300
tggtttataa accagaaagc ctaaaaaatc tcttctaagt ctatttttat taaaaatggt 360
tactcattaa tattttaatt ggaactttgc atcatctcag gtagaacgtg agtctcctgt 420

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cactatatatt anacaagaat gtcctaaaag nttgtcnatt ttctgaaaaa tagcctctgc 480
tttcccaatg gttgctgctt gcttactnng aaatatgcaa a 521

<210> 4283

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4283

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ctggacagga ctgaaggctg ctgccacctc tgcagcgect gccattctca caccacccc 120
tctgcccagt tttgctgcgt cgcgtgaagg atcctgcgt ggcgccccca cctggtgatg 180
ccgagtcctt gggggtggtt tgctgtgact gcatgcggcg cgcagcgggt atatgtgcag 240
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actctggtca ctagaggttt ggggcatagg gtttgggaag gccaggaagc gtaaaggggc 360
ttctgggggt cccgaagtag cacgggaggg tggggcaggg ctggtcacgc ctctgtgct 420
cgggcagaac aacttcgagg agccagtggc actgcaggag atggacacaa gcaacggggt 480
cctattgccc ttttacgac ccgactccag catcgtctac ctgtgtggca agggcgacag 540
cagcattcgg tactttgaga ttaccgacga gccgcctttc gtgcactacc tgaacacgtt 600
cagcagcaaa gagccgcaac ggggcatggg gtttcatgcc caaaangga ctgggattgt 660
caagcaaagt gttnagatnn ccccggtttc tacaanct 698

<210> 4284

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4284

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 tttccaccta ttatttttcc cctgtgtcat tgactttcta aagagaccag gcctgttcta 180
 ccaggatttt taaaaggggtg acattgccag aggggaagtta atgtttctct gaaggatat 240
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 taagttttgg cattaagtac tagagcatat attgtgtaaa tgtttcgcc agccaatgtg 360
 gctgatatct gttttaaagg tctcatttaa aatttagtgt ttttagtata agttactttt 420
 tggggacata aatatgcata tgatttggtt aaaaatttgg attgtaaata aaggtttatc 480
 tacctatgtg attcagttaa atttttaagt gttaagtggg gtgaattttg tgacactggg 540
 agaaagtttg catatcaggt atgaccttag aaagtaacaa atagatttgg tgcattacat 600
 cangcatgtg gaangataga tttgtccttc tgttcatgaa gaggtcattt acaaatttat 660
 naggagctaa actgactaag tacttgggaa atctgtactt gtaagctaat cacatttacc 720
 caaanccgga tttagnaata tanaagggct tttagggat tgtttggaan ttttaaaaan 780

<210> 4285

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4285

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 aactaccac atattttctt aatctcattt tttcagtttt tcttcatctt taaaagaggt 120
 tacatttcat tcctgggtcaa ctcttaaaaa gaattatgta atgttgggcc ttcataataa 180
 agagagagac tggttataag atcctttaca gtccattcat tttattctga tgtctaacca 240
 gatagacact agcaagcaaa acttccctct taatcctgga ccaaatgcat aattttactg 300
 tcactttcaa aaatctgtta tgactgaatc aaaatccttt taaagaaagg aaaaagctcc 360
 ttttgtgtca aatagttgaa caacatgaaa acagtatgag cgggttaaag atagattgaa 420
 tttttacttt acacatatga aaaacagtaa gttttgactg ctgtgtatgt tattcatgtt 480
 aatatgtgct cagttattca ctattgtaa tccacatata atcagttgct atccctgggt 540
 agacacacta tggaacttga aatgcacaat atttacattg ttagaggctt ctatccaaat 600

atctgcattc ctttaaaatg tgaactatctt gctgggtgatt aaccaaaaagg gaagattang 660
 tcatcagtgg gacatttttag ntttaangga aacaaattat taagaaatgg aatagaaaag 720
 ggngtccttt cctttggggn a 741

<210> 4286

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4286

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 aatttcactt gatcatgacc gtcgcgtccg agaagccaca caacaagctt ttgaaaaact 180
 tatccttaaa gttaaagaaac agttgggtcc ctacttaaaa agtttaatgg gagattggct 240
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 ggcttttcct ccaagcaagc aacctgaagc catagcattt tgtaaggatg aaattacaag 360
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 cgctcagctt attttgagtt agtctctgca ttgtgccaac gcantccaca gttgatgaaa 660
 gaggaagcat ccaaagttag cccatcagtt ctacntagca attgatgaca gtgacccaat 720
 ttgtctgccc aagctctccg gggaanctgt ncncnataca cttacaacta attggaggga 780
 ctgggtt 786

<210> 4287

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4287

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agaagctttt tcatttattc gtccaagcag catcttgtac tagtcctgac tggaaattta 60
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tggcattcgg tacaatgaaa ggaaaggaag gtctgaacta attgtcgtgg aagaaggaag 180
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cttcgggaaa gtttatgtca cagagaaagt ggctcaaata aaacaaattc cctttgatgc 660
ctcaaaatta cacaagttcc ccgcagatgg caaccangc acaatntggn gggangatgg 720
ttctgg 726

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<210> 4288

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4288

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gcttaagctg cgacgagatc taagtcgagc tgttactatt ctagagatga taaaaagaag 180
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agcaatggat gtgaaggagt tcaaagttaa taagcaagat aaagccgatc ttatccgacc 420

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gaaacggaaa tatgaaaaga agcccaaagt cttaccatcg tctgccgctg ctactcccca 480
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 tcccagctca gacgaagaac tctctcccag gttttgtctg gctcttcgga agctgangga 600
 agacaatgat cctgatggc cttttgcctt ccgtanggaa agcaggctgt cagtactaag 660
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<210> 4289

<211> 909

<212> DNA

<213> Homo sapiens

<400> 4289

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 agcttaataa aataaccgtc cccgccagtc agaagttgag gcagcttcaa aagatggctc 180
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 aagtcccacc caaacccaaa ggcctccttg aggatgaggc tgattatgtg gtccccgtgg 660
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 caaggaacaa gcttaaggtc caaaacagtg ggggcctggg gaaaccaagt cacctccaac 840
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 ctggangac 909

<210> 4290

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4290

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gtagaaaacc aagagtgaga aggagttact gtgccggctg cagaagctgc acctccagca   60
ccagaacgtc acatgtgaga aggaaaagct gctggaacgg cagcagcagc tgcaggagga   120
gctgcagtgc catgaggcag agctgcagca cctcagggat acggtggcct ccttcaaaga   180
gagcaatgag aaggacacag agacgcacgc tcagcttcag gagatgaagc agctgtacca   240
ggtcagcaag gacgagctgg agcggcagaa gcacatgtat gaccagctgg agcaggacct   300
cctgctctgc cagctggagc tgaaagagct caaggcctcc caccattc cggaggacaa   360
aggaaagtgt gctaataagt gtgacacact gctgtccaga ctgacagaat tgcaggaaaa   420
gtacaaggcc agccagaagg agatggggca gctgcagatg gagcagtgtg agctcctgga   480
ggatcagagg aggatgcang aggagcaagg ccagctgcag gaagagctgc acaggctcac   540
actgccactg ccaaagagtg gnctcttact caagagtcag gagctactca ccaagttaga   600
agacctgtgt gaagctgcan ctgctctacc aaggcatgca aggagggaac agaagaagct   660
tgattcaaga acccaanact ggtgtattta aaangaacaa ttttnnagat tccaacgaaa   720
naagctggc                                     729

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<210> 4291

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4291

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aaccaattgc accacgaccg gatggaagag cccagctgac acaaccaaga cgagtctcag   60
tgtctaggga agcttggggg tctgtcctt ttacttcagg cgaacctgaa ctcagttaat   120
gcaattttga agcatgccct gaatagattc agtcattatc aagtcaaact aaaaacgggt   180

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aaaggttgcg actattacca aataggaanaa acctgaagac ataagaacta cacatgagga 240
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 taacaatgac gacaacttca gtcagcagct ggccttactc ctcccacaga atgcgcttta 360
 taaccaatca tagcgaccaa ccgccacaaa acttctcagc aacaccaaatt gttactacct 420
 gtcccatgga tgaaaaattg ctatctactg tgtaaccac atcctactct gttattttca 480
 tcgtgggact gggtgggaac ataatcgccc tctatgtatt tctgggtatt caccgtaaaa 540
 gaaattccat tcaaatttat ctacttaacg tagccattgc agacctccta ctcatcttct 600
 gcctcccttt ccgaataatg tatcatatta accaaaacaa gtggacacta ggtgtgattc 660
 tgtgcaaggg tgtgggaaca ctgttttata tgaacatgta nattagcatt aatttgcctg 720
 gattcatcag ttgtgattgc tatataaaaa ttatccggtc tatacaagca accgganggc 780
 aataacaanc aagcaaaagt atttaggtcc gggtgtaaan ntangggatg ccttgc 836

<210> 4292

<211> 897

<212> DNA

<213> Homo sapiens

<400> 4292

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 tatctaacca gcctggagta tcnggaagac ttctgaagg aggagaaaac acctgggcta 120
 aatcttaaag gaagaccaga agctaccag ggaaagaagt gaaggaaggc attataaaca 180
 gagaggccag gagattccag cctcagcatt ccagagaaag gccagagatc tccctgagag 240
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<210> 4293

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4293

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<210> 4294

<211> 519

<212> DNA

<213> Homo sapiens

<400> 4294

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gaagcggag cnaagagagg gaacactgtg acacggaggg agaggctgac gactttgatc 480
ctggggaana angtggangt gganccgccc ccagatcgg 519

<210> 4295

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4295

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cctgcctcat gccccattct caaccctggc tgggcctttt gcctttaatg aaatctggag 720
 cccctccaa tctgccctaa tangcaatta ggcaaccggg ggggttnnan ggaaccntc 780
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<210> 4296

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4296

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<210> 4297

<211> 629

<212> DNA

<213> Homo sapiens

<400> 4297

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 tcaagcgtg cttagctgcc aggcatgt caatctgcag gaccacgatg gatcctcggn 540
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<210> 4298

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4298

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gcctgcantt caagggctgg gantttgttt aanggaattg acctccaacc caactgcccc 720
aatgttccaa ctgggggctg gcccgaangc tgcaatggtc aancctgaag gggcctgggc 780
aaaggaaang ggggccnaaa aaaat 805

<210> 4299

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4299

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<210> 4300

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4300

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 gacatgaaag ccacgacata caagattttt gcttcagaga aaccagaaa aatgtacatg 180
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 aatgtaattt tgtggattca ttattcacac aaaaagagaa agcaaatatt gggacagAAC 540
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 aaataatcca tactaaagag acgcaattta aatgtgatat atgtggcaag atcttcaata 660
 aaaaatcaaa ccttgcaagt catcaaagaa ttcatacngg agangaagcc atttaaagt 720
 aatgaatgtg gcaangnct tccatatatg ncacacc 757

<210> 4301

<211> 861

<212> DNA

<213> Homo sapiens

<400> 4301

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 gcctatccca anccaagact ccccttcaac ctccaatttc cggcncttg tanagcaaag 840
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<210> 4302

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4302

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 tttcaatgca tagttacaga aattcctgaa gattccccag gacttcaatt tcattgggtt 180
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 cagaaatatt taacagatta cttcttgata aaattttaat gggattatat gaatttataa 480
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 aaaggattta ttttagaata caatctatgc aatcctcgaa ctcagtgtgc ttttcctga 600
 caggatatat aaaaaggtag attaggtcaa cctccttta agcttactct cccctcacct 660
 tttentttca ctggananaa acggnacttt cctgtgattc aaaccaacan gaggactttc 720
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<210> 4303

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4303

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taaagcttta gggtccaaga agattctggg actcaggaag aaaaagtgcc atcaggtgac 180
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tggggtcact aactggtttg ttaactgagc taagaatang ctgtgggtcn cctcacttgt 600
gggccantgc tccttcgggc tatacaaaat gtccaatcnc anaattttcc tc 652

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<210> 4304

<211> 807

<212> DNA

<213> Homo sapiens

<400> 4304

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gtgaaatagc atagttatct tttgtctttt gttactagtg tgaacaaaga acggcgccta 180
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ctcagcttcc caaatagcta cgactacagg tgcattgcctc catgccctgc taattttctgt 480
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 gtggctcaac acctgggtta tccccagcaa tttttgggga aancccnagg gcaanggggg 780
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<210> 4305

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4305

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<210> 4306

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4306

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<210> 4307

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4307

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cagcagctct gctcggaag aaggcacggc ttctgctctt aagccaagt gtcttttcaa  180

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<210> 4308

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4308

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gaaaaagcat tttaatgggt ggacacagta tttttgggna caaaaaaaaa angactcact 720
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<210> 4309

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4309

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 tgctacgcgg gttttaggat cagatacaag gaggatcnac caagaaatcc tgctggccca 660
 ctgtggggct tgttgggttc aaaccaaagc tatgggnnta antttccccg tcaatgggcc 720
 ncaatcccc tgggggaatt ccnatggntt gtg 753

<210> 4310

<211> 661

<212> DNA

<213> Homo sapiens

<400> 4310

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cttcctgtgg tatactgatg agcagaactc ttccactaca tacctcaatt ttgcctaagg 180
agatatgtgc acgaactttc ttcaaaatca ctgcaccatt aataaacaaa aggaaagaat 240
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tgaggagatta caagcathtt gttccttggt gcaaaaaatc agatgttata tcaaagagat 360
ctggatattg taaaacaaga ttagaaattg gatttccacc tgtgttgagg cgatatacat 420
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tgtaccttgg gatTTTTcaa tttcttttgn atttcgatca cttctacatt cccagcttgc 600
cacactcttt tttgatnaag ttgtgaaaca aatgggnact gcctttgaaa naaaancatg 660
t 661

<210> 4311

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4311

atactaaaat tggaacgata cagagaagat tagcatggcc cctgcgcaag gatgacacgc 60
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tagactcttg cctgtcagag gagctgttga atgtttatatt gaaatgggct ttgaagaggg 180
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gtcatctcag caacctgcag ccagtacca gcttcttaca acaccatctt caaatcccag 360
tggtttaaac cagcacacaa ggaaccgtca agggcagtca tcagatccac catctgcttc 420
aacggttgct gctgactcag ccattctaga agttcttcag tccaacattc agcatgtgct 480
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aaaaaggaaa tcacaagaaa agttatcgag agctagaaaa ttggataaag atataatanc 600
cctgaagaaa cttttggaaa caaagatgtg gacggtgtgg cgagtgggcc aattgtttta 660
cactgggctg ccgancigtg gggtttgaag ctccgctatg tttgggatta cgcangacca 720
tgtctnggac agaagtcnat tctccttctc agcaan 756

<210> 4312

<211> 878

<212> DNA

<213> Homo sapiens

<400> 4312

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caaagaatca aggcgatagt gccagaaagc agcctggctc atccacctcc agttcttctc 180
acctagcgaa gccttcagc agcagactgt gtgacaccag ttctgcaagg caggaaagta 240
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aaccaagtga ctgtgtaccc tacaagatg aagaacttta tgatcttcca gctccttgta 420
ctcctttgtc ccttagttgc cttcagctca gtactccaga aaatagagag agctctgttg 480
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aattctgttg gagaaatatc ctcaaaantt gaggtgagga aaatcaaggc ttaaggttta 780
tccaaaaagg gtgaattcca atccgctcct ttgaaatgga ccgggcaaga catccaagtn 840
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<210> 4313

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4313

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gaaatctttt gatgcacatc ccaggaagga gagccaagtg cgacagcttg cgtgggtggg    60
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ttatcaacat ctacaggatg tggacattga gccittatgta agcaaaatgt taggtacttg   180
aaaactgggc ttctcttttg tgagaattac agctcttatg gtgtcttgta atcgtttg   240
ggtggggaca ggaaatgggtg tcattatctc catcccatg acagaaaccg taatcctcca   300
ccagggacgt ttactggggc tgagggcaaa taaaacctca ggtgtaccag gaaatcg   360
tggaagtgta atccgtgtat atggtgatga aaacagtgat aaagtgactc cagggacatt   420
tataccctat tgttcaatgg cacatgcaca gctttgcttc catgggcacc gggatgctgt   480
gaaattcttt gtggcaagtc ccaaggtcaa agtcatcagc ccacaaagta gcagtagtgg   540
cacggatctg acgggtgaca aaagcaaggc catctgcaca aggagcctgg gtaatcannc   600
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<210> 4314

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4314

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tacaagtgca atagcaaaac aggaagatgt ctctgttcag ctagaagcct tggatattat   120
ggctgatatg ttgagcaggc aaggaggact tcttgtaaat ttccatcctt caattctgac   180
ctgtctactt cccagttga ccagccctag acttgacagt aggaaaagaa ccattatcgc   240
tcttgccat ctggttatga gctgtggaaa tatagttttt gtagatctta ttgaacatct   300
gttgtcagag ttgtccaaaa atgattctat gtcaacaaca agaacctaca tacaatgtat   360
tgctgctatt agtaggcaag cgggtcatag aatagggtgaa taccttgaga agataattcc   420

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tttgggtgggt aaaattttgc aatgtagatg atgatgaatt aaaagagtac tgtattcaag 480
 cctttgaatc atttgaagn aagatgtcct aaaggaagta ttcctcatg tttctacat 540
 tataaatatt tgtcttaaat atcttaccta tgatccaaat tataattacg atgatgaang 600
 atgaaggatg aaaatgcaat ggatgctgat ggggtggtgat gatngatgat caaggggagt 660
 gatgatgaat acagtganga tgatgacatg aatttggan gtganacgtg canctggcga 720
 aagtggcttg ggatgcctgg taanttaagc aacaagggca at 762

<210> 4315

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4315

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 aaccagcaaa catctccatc tgaggagctt ctattagaag accagatgag gcgaaaactc 180
 aaatTTTTTT tcatgaatcc ctgtgagaag ttctgggctc gaggtagaaa accatggaaa 240
 ctigccatac aaattctaaa aattgcaatg gtgactatcc agtacttgca gctatacaat 300
 gtctccgttg ggaatcatgc ttatgagaac aaaggtacca agcaatctgc tatggcaatc 360
 tgtcagcact tctacaagcg aggaaacatc taccctggaa atgatacctt tgacatcgat 420
 ccagaaattg aaactgagtg tttctttgtg gagccagatg aaccttttca cattgggaca 480
 ccagcagaaa ataaactgaa cttaacactg gacttccaca gactcctaac agtggagctt 540
 cagtttaaac tgaaagccat taatctgcag acagttcgtc atcaagaact ccctgactgt 600
 tatgacttta ctctgactat aacatttgac aacaagggcc atagtggag aattaaaata 660
 agtttagata atgacatttc catcagagga atgtaaagac tggcatgtat ccgggatcaa 720
 ttcagaagaa cactccatta catgangatc tttgntgcct ttggcattct gacttgcttg 780
 ggttcaataa ncccctgcat tanatntggg attaaggact caacttcaca 830

<210> 4316

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4316

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atgctttact ctgttttga cttttcttt tgaaaaattt tgagatagaa accttaatat 180
catttcatat atttacagca catagttaat ttgagtagag tcaaattaat cttactttag 240
aatttgatta ctaagtatta gcatggataa taatgcttct ttgcttaaa tgtaaaaatt 300
aggccgtttt actagggtga ctttgtctta atcatattcc tttttttta tacagctgtg 360
caacatatt gcttctggga aaaaatgtca atatgtggga aactgttcct ttgctcatag 420
tcctgaggaa agagaagttt ggacttacat gaaggagaat ggatacaag atatggagca 480
attttacgaa ctatggctca agagtcaaaa aaatgaaaaa agtgaagaca tagccagtca 540
gtcaaacaag gaaaatggaa aacaanttca catgccaaca gattatgctg aagttacagt 600
gggactttca ctgctggatg tgtgggaaaa ctgcaacagt gagaagcagt ggcagggcca 660
catctctcc gagaagcaca aagagaaggg ttccacacc ganggacgac cantacctgc 720
tgncaagcac ngccttccca acaaggctat ttcaggtatt ggtgacnagg tata 774
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<210> 4317

<211> 680

<212> DNA

<213> Homo sapiens

<400> 4317

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aatacttgct ggtctgatcc atgcacaagg cggggctgct aggcctctgt gcccgggctt 60
ggaattcggg gcggatggcc agctccggga tgaccgccc ggaccgctc gcaaataagg 120
tgccctggc aacggcctcc accgacggga tcggcttcgc catcgcccgg cgtttggccc 180
aggacggggc ccatgtggtc gtcagcagcc ggaagcagca gaatgtggac caggcgggtg 240
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ccacgctgca gggggagggg ctgagcgtga cgggcaccgt gtgccatgtg gggaaggcgg 300
 aggaccggga gcggttggtg gccacggctg tgaagcttca tggaggtatc gatatacctag 360
 tctccaatgc tgctgtcaac cctttctttg gaagcataat ggatgtcact gaggaggtgt 420
 gggacaagac tctggacatt aatgtgaang cccagccct gatgacaaag gcagtgggtgc 480
 cagaaatgga gaaacgaaga ggcggctcag tggatgatcgt gtcttccata agaagccttc 540
 agtccatctc ctggcttcag tccttacaat gtcagtaaaa cagccttgct gggctgacca 600
 anacctggc catanagctg gcccgaagga acattanggt gaaactgcct aacacctgga 660
 cntatcaaag actancttca 680

<210> 4318

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4318

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 cttccttctt agtctccatc ttctccagga gccagaaaaa aaggagagag agagcatcag 120
 gtggcactgt ttatgggcct ttcatggaag tgacacctgg gggttacttct gcttatgttc 180
 ctttggacag aattcagttg aatggtcata ctagaggcat tgtgccaggc tttgcagcat 240
 aaaaagaagt tagagacagg gactttggat ccaagtcctc cctgactcaa aaccagaga 300
 ggcagaggat gcttgccacc ttgactagt cctatctcct ccaaagggtc cttttgattt 360
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 tagctaaaga tgtccaaaga gacttctaag ccaatgattt tcaacaagga aattgaagtt 480
 gtatgctttg aagagagggg cttgattggg tggcatctta tgcttaantg tgcattgnag 540
 agccatccta catgcagcat gtgatgggcc cccagggact gaggacttgt gtatgactgg 600
 gagtctacgc aacttggtt catatcagtt cttgccatct cgggatccaa atgctctcca 660
 aggcataaag tcatttctc caaagagant ttgangatgc cccaagaaga atctttaagg 720
 ctaanggtca ctaattcctt aaagcctaaa gggcaacc 758

<210> 4319

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4319

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gatccttgtc ctttctctca aactccctga agaagctcgt cccctttcag ctccctgggt   60
cgaagagtga gcacaaagaa cccaaagata aaaagataaa catactgatt cctttgtctg  120
ggcgtttcga catgtttgtg agatttatgg gaaactttga gaagacgtgt cttatcccca  180
atcagaacgt caagctcgtg gttctgcttt tcaattctga ctccaaccct gacaaggcca  240
aacaagttga actgatgaga gattaccgca ttaagtaccc taaagccgac atgcagattt  300
tgcctgtgtc tggagagttt tcaagagccc tggccctgga agtaggatcc tcccagttta  360
acaatgaatc tttgctcttc ttctgcgacg tcgacctcgt gtttactaca gaattccttc  420
agcgatgtcg agcaaataca gttctgggcc aacanatata tttccantc atcttcagnc  480
aagtatgacc caaagattgt ttatagtggg aaagttccca gtgacaacca ttttgccttt  540
actcagaaaa ctgggcttct ggagaaacta tgggtttggg atcacgtgta ttataaagg  600
gagatcttgt ccgaantggg tggctttgat gtttcaatcc anggntgggg ggctggaggg  660
atgtggggcc ttttcaacaa gggttgtcaa ggcaagtttg a                          701

```

<210> 4320

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4320

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caaagcttcc tacaggaaaa taaacactca catcctaaag gttccagaaa cagatgaggt  120
agagctcacc tgccaggcta caggttatcc tctggcagaa gtatcctggc caaacgtcag  180
cgttcctgcc aacaccagcc actccaggac ccctgaaggc ctctaccagg tcaccagtgt  240

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tctgcgccta aagccacccc ctggcagaaa cttcagctgt gtgttctgga atactcacgc 300
 gagggaaactt actttggcca gcattgacct tcaaagtcag atggaaccca ggacccatcc 360
 aacttggctg cttcacattt tcatccctc ctgcatcatt gctttcattt tcatagccac 420
 agtgatagcc ctaagaaaac aactctgtca aaagctgtat tcttcaaaag acacaacaaa 480
 aagacctgtc accacaacaa agagggaagt gaacagtgtc atctgaacct gtggtcttgg 540
 gagccagggt gacctgatat gacatctaaa gaagcttctg gactctgaac aagaattcgg 600
 tggcctgcaa agcttgccat ttgcactttt caaatgcctt tggntgaccc agcacttaaa 660
 tctgaaacct gcaacaagga ctagccaaca cctggccatg aaacttgccc cttcactgat 720
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<210> 4321

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4321

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 aaataacata aattcaaaag gattccaatc tgaagcccaa atcgtttgcc tacataacaa 180
 aaatatctca tcttttctg cacattatta ttcttttatg ggtaaaaaag aaaaatacct 240
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 gctcaacctg aaatcaattg cattgacat ttggcttcgc acaataggga gaaaataatt 420
 gggtcattga ttatatagag agaaagacta agaaaagcta ttaattgcta ccaattttat 480
 gataagcttt aaggtttatg aaagtatgtt tttttattta atgagtaatg tccatttgaa 540
 gttgaaagaa aacatgaaat cctaattgta gttcatttta tgttcaaatg aaaccattgg 600
 ttttggtttt gntttgaaac agagtctcac tctgttgccc aaagggtggag agaagtggna 660
 cgcttttgtc ctactggna aacctccaac tccccagggt tcaaagtga ntcncngng 720

cctcaaacct ccccaaaatt tataagg

747

<210> 4322

<211> 194

<212> DNA

<213> Homo sapiens

<400> 4322

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cctcctggaa tgaccttaaa tgagaagagt gttcaaaatt caattacaca gtggattgta 120
gacatggaaa ggtgatcagg taccttatat gaaggggaaa aatttcaact tccaattaaa 180
tttannantc cata 194

<210> 4323

<211> 883

<212> DNA

<213> Homo sapiens

<400> 4323

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ccgcagcaat gccatgccac atattaagac atatatgagg ctttctccag acttcagtaa 180
aattgcttgg ttccttgtca caagcgaaa tctgtccaag gctgcctggg gagcattgga 240
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agcatttggg ctagacagtt tcaaagtga acagaagttc ttcgctggca gccaggagcc 360
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gccatggata tggaacattc cttatgtcaa agcaccggat acgcatggga acatgtgggt 480
gccctcctga gaatcttgag gcaactgtga atttaagtgt aagacattga gccacaaaca 540
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aaatctttcc aaaggtcact cttatgaatg gatgttggtt atacttttaa tggacattaa 660
cattcctaataa aaagtattaa gttcctaatt cacittttata tgttttggaa agaaaattag 720
tgaacttctc tatgttaaaa aatacgtact gcttgagtaa cccctgtctg aaaatgcctg 780
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<210> 4324

<211> 792

<212> DNA

<213> Homo sapiens

<400> 4324

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gacttacaga gagttccaag aaactatgat cctgctttac atccttttga ggtcccacga 120
gaatatgtaa gagcttttaa tgctacaaa ctggaacgag tatttgcaaa accattcctt 180
gcttcgctgg atggtcaccg tgatggagtc aattgcttgg caaagcatcc agagaagctg 240
gctactgtcc tttctggggc gtgtgatgga gaggttagaa ttggaatct aactcagcgg 300
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agtagtgta aatttaaccc aattgagaca tttctcttgg gaagttgtgc atctgacagg 660
aatatagtac tgtacgatat gaggcaagct accctttgaa aaaagggtat cttagatatg 720
agaacaaata caatctgttg gnaccctaag ggaagctttc anttttacan cangcaaatg 780
gaagnattat aa 792

<210> 4325

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4325

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tatttcttca tgggtcaatat cactctttta aagctagcaa aatatgactt tcttctgagg 180
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attctcaaaa agaagaaatt atttctgatg gtagatcaaa ctctagccaa gaaggcttag 480
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ttaatttttg ttcctgtgta aaaattatta ttaatggatg gcagcccaaa ttactattct 600
tcttttaaaa tttgtttcaa gtgtgtcacc aggcaactcat aaaattcatt tatttggtat 660
ataactcaat gacctgaaat aataggtgct caatgctttt tcatttgatt ccttaaaaaa 720
caatttttat tccggtncaa aaaaaaaatt cccccngcn aaaaatccca aaatggattt 780
acctggg                                           787
    
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<210> 4326

<211> 843

<212> DNA

<213> Homo sapiens

<400> 4326

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cccagctctg cgagagccag gggaaaagga agagaggcag ggaaggaaag gcagcaagta 180
caaggtgatg aatgactgca ctggccattg ctcatgaag agccacgaaa aaacagagcc 240
    
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ggttttctcag caggttagctg gctgctcagt cacaaaggac ctctttggac aggcttttat 300
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 ctcactttgt cttctttctt ctgctgggtca aaatttgctg gctcgggcag ttaacgccct 420
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 gaagcatatt tttttctgga gagaaggagg aaaccaccag gaagaatata aacagganaa 720
 aaagacatgc tcatcatgcc ctgcaaactc ctatgaactg ggaactacag cagctgttct 780
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<210> 4327

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4327

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ataagtccaa tgatgcaagg atttggacct tggnaattca agttttattct ccgcagatac 720
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<210> 4328

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4328

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<210> 4329

<211> 336

<212> DNA

<213> Homo sapiens

<400> 4329

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gtttcttgca gcgggggctg ctgcctaaac agactccgcg ggcccatga tggcaaacc 180
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aacaagaaat tgcactctct caaaacgaca gtcnccctga aacggacgct ggaagagggt 300
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<210> 4330

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4330

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ctcctacaca gtgtggaagt ggaagtcagt tactttgcag ctggaattat tgccatttta 480
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<210> 4331

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4331

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ccaagaaccg gaggcagaag gctcatgtca ccgatccaaa ggcagacccc cgggctctcc   240
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<210> 4332

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4332

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atgcacaaaa gcagcctgtt aaaaatcagc ttggattaaa cccgcagtca catctaccag   180
aactgcagct atttcaagct gaagggaaaa tatataaata tgatcacatg gaaaaatctg   240

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 aatcaaattt cacaccttgc acaacatcaa aggattcata ccggagagaa accttataaa 720
 tgtatgaatg tggaaaggtc ctccatcaaa tttcacaacc ttgcacaaca tcngacaant 780
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<210> 4333

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4333

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<210> 4334

<211> 794

<212> DNA

<213> Homo sapiens

<400> 4334

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ccaagctccg gagaggcgcg gaagcatgac cctcaggtgg taacagaaaa caatccagat  180
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aattggggga ctccaaangc tccttctgag gcaaaaagtt ttgccttga agtacaagac  720
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<210> 4335

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4335

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<210> 4336

<211> 792

<212> DNA

<213> Homo sapiens

<400> 4336

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<210> 4337

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4337

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<210> 4338

<211> 575

<212> DNA

<213> Homo sapiens

<400> 4338

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<210> 4339

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4339

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<210> 4340

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4340

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<210> 4341

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4341

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<210> 4342

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4342

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 attcactttg ccctgggcta atccnttaaa aaagatgtgt gttcctaata cttcaaaaanc 720
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<210> 4343

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4343

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<210> 4344

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4344

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<210> 4345

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4345

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<210> 4346

<211> 845

<212> DNA

<213> Homo sapiens

<400> 4346

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<210> 4347

<211> 853

<212> DNA

<213> Homo sapiens

<400> 4347

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<210> 4348

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4348

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<210> 4349

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4349

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 acacttacca aagaaagaca ttatacagc caacgaacat gtgaagcaaa gcacatcatc 720
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<210> 4350

<211> 632

<212> DNA

<213> Homo sapiens

<400> 4350

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<210> 4351

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4351

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 aatcatgtca gaaagtgaag cagaagtagg ccatgtgtta catgcatggc tggagcagga 360
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<210> 4352

<211> 867

<212> DNA

<213> Homo sapiens

<400> 4352

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<210> 4353

<211> 636

<212> DNA

<213> Homo sapiens

<400> 4353

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 tggttccaaa tactaaaatc cagatgtcat attcagtaaa atggaaaaag tcagatgtga 480
 aatttgaaga tcgatttgac aaatatcttg atccgtcctt tttcaacat cggattcatt 540
 ggtttcaatt tcaactcctt catgatggtg atcttcttgg ngggcttagt ttcaatgatt 600
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<210> 4354

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4354

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gagaatgtta tcaactcatc aacctatcaa tactgttgaa agcgtctctt ttttcttcat 660
gggcaccanc ccatcannct gggaggttta tccaagaaaa ttttcccaa aaaggaaagn 720
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<210> 4355

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4355

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 ttttaagggtg cgcctaattg gctccccggt ttctgaaac tatancaaca atttttgggg 720
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<210> 4356

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4356

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<210> 4357

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4357

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<210> 4358

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4358

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<210> 4359

<211> 821

<212> DNA

<213> Homo sapiens

<400> 4359

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821

<210> 4360

<211> 801

<212> DNA

<213> Homo sapiens

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<210> 4361

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4361

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<210> 4362

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4362

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<210> 4363

<211> 775

<212> DNA

<213> Homo sapiens

<400> 4363

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 cagcactgcc cgcttttagc gtcttcactt cttcacagag ttcagtgcgt ggaatctttc 720
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<210> 4364

<211> 807

<212> DNA

<213> Homo sapiens

<400> 4364

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<210> 4365

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4365

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 ttcatttcat tcacccactt ttgatggcat tgtttgtttt tttcttgtaa atttgtttaa 480
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<210> 4366

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4366

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<210> 4367

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4367

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<210> 4368

<211> 738

<212> DNA

<213> Homo sapiens

<400> 4368

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gaaatgttgt catccgtcat accagattcc aggagagaaa atgaacttcc cgatttcccc  180

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cacattgatg agtttttttac ccttaactca acaccatcta gatctgcata tgatgagcct 240
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nctgcanatt gaaaagggaa cgcttacagg tanagaaaag acagacttcn aattcagaaa 660
gaaaggcact tgcaagtgan tttccaggc ttccatttag caaatgttt ggaaaaacnc 720
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<210> 4369

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4369

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gaggaagaaa tcgaagattc agaagcaggg aaagaaaacg gcgggtnaag tctcgttccc 660
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tcgagata

728

<210> 4370

<211> 680

<212> DNA

<213> Homo sapiens

<400> 4370

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aacctcaagn acctctgcat aatgttcaag ttttaaataa aatgataaca tcaaggatca 600
tatccangaa cntaacatgg nctgcatttc taaagaanca gggttcaaga ggctttctgg 660
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<210> 4371

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4371

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<210> 4372

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4372

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<210> 4373

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4373

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<210> 4374

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4374

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<210> 4375

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4375

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<210> 4376

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4376

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<210> 4377

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4377

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<210> 4378

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4378

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<210> 4379

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4379

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<210> 4380

<211> 853

<212> DNA

<213> Homo sapiens

<400> 4380

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tccagctgcc tcacagactc accgtcagcc atgcgggaga agaaccgcag caccaggca  540
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<210> 4381

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4381

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<210> 4382

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4382

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 caagagcaag caactccttc tggttggtaa ttggaaaatc ctctcttac attgggcaga 600

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<210> 4383

<211> 574

<212> DNA

<213> Homo sapiens

<400> 4383

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 aataactcta tttccaactg aaacactcaa tttcccagggt aaactggtaa ttcccaggag 480
 ctttcanagc attttcagna aacctanntg accagttcct ttatatgaag gataantata 540
 tcatgtgtat atgttcaaag tatagcagct gtgt 574

<210> 4384

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4384

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gccagtgtta ttacgttccc atccgattca cctcagaact catcgcagct gcaaaggaaa 180
gtaaaagaag ataaaagatg tttcacagct aacaaaaata atgttggaga tacctcccg 240
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<210> 4385

<211> 709

<212> DNA

<213> Homo sapiens

<400> 4385

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caggagttat acggccttgg gaaagtcact taactgctct gaaccttaac tttcntatct 480
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<210> 4386

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4386

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aattgacgcc atgaaaccat ttggagtgtt tgaagatgag gaagaattga accacaggct 180
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aggattcctt ggnggggncc cctgggcaat gctaagtcca annaacttgc caattgtatc 780
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<210> 4387

<211> 850

<212> DNA

<213> Homo sapiens

<400> 4387

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<210> 4388

<211> 863

<212> DNA

<213> Homo sapiens

<400> 4388

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 aaggctctgc aggatatgaa gcaacctctg tctcattact ttataaactc atctcataat 180
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gtaatttaca caggccacac catgacctct cagatagttt tccgcagtgt cattgatatt 360
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<210> 4389

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4389

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<210> 4390

<211> 848

<212> DNA

<213> Homo sapiens

<400> 4390

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<210> 4391

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4391

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<210> 4392

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4392

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<210> 4393

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4393

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atgcatgttc caacatttcg tgtccaggac tattgctggg aagatcatgg ttattctttg 180
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<210> 4394

<211> 845

<212> DNA

<213> Homo sapiens

<400> 4394

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gggaa						845

<210> 4395

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4395

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cccgttatac	tcagtgttgc	tgaaaaagtc	catttttaaaa	taatggcacc	taccacatcc	180
atttttccgt	ctttaggcca	gaccctctga	tggttggtgg	attttagtat	taaagcttgt	240
gttgaaagtg	gagggggtgt	tactactgtt	gtgtctgaaa	caagagttaa	ggttatattt	300

tatgaagcag ttttggcttt ttcaacagat gttggccact cacttttatg gatttcacat 360
 tgagtagtaa tgagtcataa tcactactta attttcccaa accagaggga atatacattt 420
 tattattgga cctccaggc tgtcaatgaa gagagaaaac ctttctttgg aatcaagttg 480
 aaaacctggt gttaacacct ctctctgggc cttctttgct ctccttagca cgttcattgc 540
 taggggctgc cacttccatc ttctctgcct tggaaagcat agagtcgttt ctcaagcctc 600
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 ngcaa 665

<210> 4396

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4396

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 gcggcgctgg cggcggccct gggaccgcg gaagccggca tgctggagaa gctggagttc 180
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 agatactata aatcacctat ggtacagatt tatgaattag aggaacataa aattgaaaca 480
 tggagggagc tttatttaca agaaacattt aagcctttag tgaatatatc tccagatgca 540
 agcctcttcg atgctgtata ctcttgatc aaaaataaaa tccacagatt gcccgttatt 600
 gaccctatca gtgggaatgc actttatata cttaccacaa angagaatcc tcaagttcct 660
 ccaagctttt tangtccgga tatgccaaaa gcctgccttc atgaaagcaa gaacctggat 720
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<210> 4397

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4397

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ctgaaaggct cccggagctc cgagctgcta ggtcaggcag ctcgaaacat ggtactccag 180
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ctggccaaga tgggtgaaacc ccgtctctac taaaaataca aagaattagc tgggcgttgg 600
tggcggggcg ctgtaatccc aagctactcc gggaagctga gggaaganga atccccctga 660
aaccaagga nggtgggang gttnccaatt gnaggccaaa g 701
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<210> 4398

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4398

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ttgagcagct caaaatggca gtcaccaacc taaagagaca ggctaacaag aagagtgagg 180
gcagcctggc ctatgtgaaa ggcggtctca gtacattctt cgaagcacag gatgccctct 240
cagccatcca tcaaaaacta gaagcagatg gaacggaaaa agtagaagga tccatgacgc 300
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 ttaagtttct tttcaacctt cctctaaata ttgaaaggaa tattcaaaag ggtgattatg 480
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 ttttcaagaa atattatgct gaagtanaaa caaggattga agctttaaga gaattacttc 600
 tggataaatt gcttgagaca cccatcaact tttacatgac caaaaaacgt tacataaggg 660
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<210> 4399

<211> 802

<212> DNA

<213> Homo sapiens

<400> 4399

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 gatttgcata cttagagatt aagcccatgt tcattaatta tttagttaat tcaaaagcca 180
 ttaataaatc catgcccagc ctacgcaaca tagtaagacc cagtctctac aaaaatttta 240
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 agaggattgc ttgagcccag gaggtcgagg ctgcagtga cgtgattgt gtcactgcac 360
 tccagcctgg gtgagagagc aagaccttgt ctcaataaat aaaccaagt tacttcgatg 420
 actagatact ggaggtctga aggagaagct ttaaaaatac agattgattg cttcagagaa 480
 atcctattta taattatgat ctgaacttat tctatgatta gcaaataat catctgaaaa 540
 taaaacagga gttctctccc cagacttttg tttttcagga tggtagttt tgggtctggga 600
 cccatcatgn acccattttg gtaaaaggaa aaagatagta naacaggga taggaagttt 660
 ccagagattt gggcatctca nggatccatg aaatgctgag actaanccac taaatccaaa 720
 ttttattggc tanggnaaat ccnaaatccg gtcagtgttc cggacaagat tttaggagtt 780
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<210> 4400

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4400

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at t t t c c a c g   c t g t a c c g g c   g g a a a t t c a a   g c a c t g g a a g   a g a g g t t c c g   g g g c t g g g c t   60
g g c c t g a c t g   a a g g c g g c g g   a a t g g a g a c g   c g g a c c g a g g   a c g g g g g c c t   c a c c c g c c g c   120
c c c a c g c t g g   c c t c t t c t t g   g g a t g t t g c a   g g c g g g g c c c   t g a c c c a c a g   c c t c c t c c t c   180
a c c c g g g c c g   g t c t c g g c c c   c g g t g a c t t c   g a c t g g g a g g   a g c t g c t g g c   a c c g c c t g c t   240
c c a g g t c a g g   a t c t g g t g a t   t t t g a a g a g a   a a c c a c a a c g   a c a a a g a t g a   a a a c c c c t g c   300
t t c c t t t a c c   t g a g g t g t g g   c c c t g a t g g a   g g t g a a g a a a   t c g c t t c t a t   t g g c a t t t t a   360
a g t t c a g c a a   g a a a t a t g g a   a g t g t a c t t a   g g a g a g g a g t   a c t g t g g a a c   c a g t a g g g g c   420
a a g a a t g t t t   g t a c t g t c c t   g g a t g a c a g t   g a a c a t g a a a   a g a t c a t t t t   g t a t a a a a a a   480
a a t c t a a a a t   t g g a g t c c t c   c a c a c a t g c t   t g t a a a a t a a   a g t t g c t c t c   c t t t g g c g a a   540
a g g c a a t g t g   t g t t c a t c a g   t a a a g t t g t g   g t a c a c a t g a   g a t c a g t t t t   t g c a a a t t c t   600
t c a a c a a g c t   c t c c t g c t c t   a g g a t n a a g g   a t a g a c c t t g   a c a a g g t c c a   a a c c a t a a t n   660
g g n n t c a a t g   g g g t c a a a g n   t a c

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<210> 4401

<211> 687

<212> DNA

<213> Homo sapiens

<400> 4401

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a c g t c c c c g c   c g g g c c c g c g   c g c c t c g t g c   c t c g c g c c t c   g c g c c t c c a g   c c a c g t c c c c   60
g c c c c g g c t c   c g g c g c g c c g   c g g a g t t g g c   t g c t g g g a g g   t g c g g g a c t g   g g t g t g g c c g   120
g c g g c t c t g g   t c t c g g c t g t   g a g c t g c g c t   c t c c a c g c c g   g c t c c g c g c t   c c a g g g g c t g   180
c t g a g c g c c c   a g c g g a c a c c   g g c a g c g c g c   g g t c g a c g c g   g g c c t g a g c t   c c c t c c a g c t   240

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gttttcactc attagctcct gaggtaaaca aattgaaaaa atgagcgaac tggaacagtt 300
gaggcaagaa gcagaacaac tgcggaatca gattcaggat gctcggaaag catgtaatga 360
tgcaacgctt gttcagatta catcaaataat ggactccgtg ggtcgaatac aaatgcgaac 420
aagacgtaca ctgagggggcc acctagctaa aatctatgct atgcattggg gatacgattc 480
caggctgcta gtcagtgtct ctcaagatgg aaaattaatt atttgggata gctatacaac 540
aaataagatg catgctattc ctttgaggtc ctctgggtg atgacctgtg cttatgctcc 600
ctcctggtaa ntatgttgcc tgtggaaggc ttggcaacat ctgctctata tataacttaa 660
aggaccaana gagggaaaat gntnana 687

<210> 4402

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4402

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gctttcggag tgcggttgct caggggaagc cgtcgcgcc cccgcctcgg ggccgagtga 180
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tagacgttac ttacctggg gaangtgga aaaggattga cctttcaagg gtgtcaatca 660
aatttgtctc ccgggttaag ttgggaacct actgcaanaa ntactganaa ggacggacct 720
tgcctgancc aattngaatt t 741

<210> 4403

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4403

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ctttatggcg tgggagaggc cacagcccgg actccatcga ctcccccggc tcttagacta   60
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tcaaaaaaaaa agaagcctct cactttcagt ccaagctaata tacacctcct cctccaccac   180
cctcaccaga aagagtcggt atttcttcaa tagatatatc tcaaagcaga agctggctaa   240
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gagtatggtc tatatacagc tggtgccaga actgcataac ccagagttaa gaagtattga   360
aagacaccat ctttccatct cgtatctgcc accgagaact ttacagtgtg aaacaacagt   420
tttgcatttt ggaaagtaaa ttatgcaagc ttcaggaagc actgaagacc atctcagaaa   480
gttcttcctg tccaagctgt ggtcaaacat gtcacatgag tggtaaactt acaaagtgtg   540
ctgcctgcgt tctgatcacc cctggagact ccaaagctgt gcttcctccc aactgccac   600
agccagccaa gcattttcct cctcctcctc canctccaac tctgccacct cctccaccac   660
cactagcacc tgtgttgctc agaaaaccca ntctcgctaa agcaacttca agctggacca   720
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<210> 4404

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4404

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tcaccaaagt taccgcacaa tgggtccaca ggttccaccc cactgctgag gaattctcac   60
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aatgagttaa gagacaagga gatgaagctg acggatatcc gcttagaagc tctcagttct   180

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gcccaccagc tggaccagct ccgggaggcc atgaacagga tgcagagtga aatagagaag 240
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 gtggaaggag gattccagac cacacctctt tcttattggc tgcattgggn gttantggca 540
 agacnaagtg gggatgtgct ccaatggggg tggttanacc ggctgttcaa agnatacatc 600
 attcatgtcg aaccaat 617

<210> 4405

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4405

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 aagctactga atcccagata caacttgcca ttagacattc agaatagaat cttgaatttc 480
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<210> 4406

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4406

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agatgtgaaa ttgcaggatg caggggtgta ccgctgcatg atcagctatg gtggtgccga  180
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<210> 4407

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4407

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atctactact tcttccgaga ggacaatcct gacaagaatc ctgaggctcc tctcaatgtg   60

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 aaactgta 728

<210> 4408

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4408

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aggctgagac agtgggaagag tcaaacttgc cctgaagctt cactcancca gtacctgtct 660
cctctgcccc atgtccanca acttaccctt gacccaatcc ttttaaggga actttgccaa 720
agagaaganc aanaatactc tttctttcct caacnctccc ctnccttttt ttgg 774

<210> 4409

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4409

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ggaaggtctg aaaattgaac aagatggacg ggtccaggaa agaggaggag gaagacagca 180
cactcaccaa catttctctt gcagatgaca tagaccattc ctcaagaatt ttgtatccaa 240
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cagaaaacca agttctttgga caatatatag aaaatctcat gtcagcttct agtgtttttc 480
aaacaactga cacaaaaagc aaaagaaagt aagggattga cacccttctg ttttatggaa 540
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gtggcttcat tgggatattt atgangataa tgtcagatgt agacaaaatt aacacantaa 660
caggagactt ccataagttt gtgtattatg ttagtctatg aaaacgtgca aatgtattgt 720
agagactttt atgattagaa ntgcatanat ttatgaaact taaagatgaa tggttttaat 780
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<210> 4410

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4410

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gaatgtgcta gaagcactct cagaaaagaa gtctgccagg ggaggactag ggtccaaaga 180
gaatctacat ggttggtagg taggcatgaa aaaaggaagg agagagagag agaatatggt 240
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acataactta gggaaaaata aatattattt tcattagcaa acatattaat attttataag 360
ctttgcagtt atccaacacc cataaatata ttccgggaaa ttaagccagt cttttcagtt 420
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ctgtaaatca gtcataagaa aaagaacata tataatctgg agtagaattt tgcttccact 540
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tttacctttt cttttgttg agaagtagta gtaatccaca tgtattttta gctaacaaaa 660
cacgtccatg aattagatta tttccttgaa gccttttcat caaatatttt gtgggccttt 720
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<210> 4411

<211> 841

<212> DNA

<213> Homo sapiens

<400> 4411

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ggttggagac attagatgga ggccaagaag atggctctga ggcggacaga ggaaagctgg 420
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<210> 4412

<211> 852

<212> DNA

<213> Homo sapiens

<400> 4412

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ccncccaatc aa 852

<210> 4413

<211> 799

<212> DNA

<213> Homo sapiens

<400> 4413

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<210> 4414

<211> 868

<212> DNA

<213> Homo sapiens

<400> 4414

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<210> 4415

<211> 891

<212> DNA

<213> Homo sapiens

<400> 4415

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actagtgggg aagacgatta acacacctct tacagtaata ctgcctgtta ttggtatagc 360

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 gtttttgtca aatagcaatg tgaangaggt tacaattttt ctaaaaaag aattgggggg 840
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<210> 4416

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4416

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<210> 4417

<211> 859

<212> DNA

<213> Homo sapiens

<400> 4417

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aaaacttang gattctggc 859

<210> 4418

<211> 925

<212> DNA

<213> Homo sapiens

<400> 4418

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 aagctgatgc tttaaaacat aaaaagtcca agtaatcaat gaaatgcaag naaaaaagga 780
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<210> 4419

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4419

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ctggctactg ctttgtaa at ttgcagattt ggncacaanc tganaagtgt tttgcataaa 720
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<210> 4420

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4420

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aggagctgct ggnacaaaaa ggccgtgctc gaacaagtgc aactggacan tccaattggg 660
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<210> 4421

<211> 826

<212> DNA

<213> Homo sapiens

<400> 4421

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<210> 4422

<211> 646

<212> DNA

<213> Homo sapiens

<400> 4422

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<210> 4423

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4423

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<210> 4424

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4424

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<210> 4425

<211> 859

<212> DNA

<213> Homo sapiens

<400> 4425

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<210> 4426

<211> 876

<212> DNA

<213> Homo sapiens

<400> 4426

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 ttggggggga acaaagcctg gagaaaccaa gnttttccct gggcaattta accattgggc 840
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<210> 4427

<211> 850

<212> DNA

<213> Homo sapiens

<400> 4427

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 ggccgaggac gtgagggtgg agggctcctt tcccgtagacc atgcttccgg gagacggtgt 180
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 ggagtataag ggggagctag cctcctatga tatgcggctg aggcgtaagt tggacttatt 420
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aaggaaanttt

850

<210> 4428

<211> 863

<212> DNA

<213> Homo sapiens

<400> 4428

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gctcatgcct gtaatctcaa cactctgaga gactgaggca ggaagatcgc ttgaggccag	180
gagtttgaga ccagcctggg caacatagca agtcctagtc tctacaaaaa taataataag	240
aagaagaaga agaagaataa atccctttta actacaataa gcagagacca gttattcatt	300
ggctatatatt ttaagattgc cagcttttca aatgcagcaa aataaatgaa aaaagaactt	360
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gaaacaattt taaaatgacc acatattatt taattttaaa agcacacttt taagaacccc	540
atttcttatg aaaggtttca tatcgagatc atttgattatt gtgagactgt atctggtgga	600
aaggaaagat aggagtattt ttcataatgta aaatgagtaa gactaaaaca tgggaggaga	660
gatttatgac ttttttttta catcatccag ctatgggntt gggacgtggt ttgttttaca	720
atttttcttc cccaggaatc ccctanaccg gtttgatcca aangaaagta atttgggcaa	780
aatccaattg gacctagtat ggntaaatca ccagtttacc tttgtgnagg ggaagtgtca	840
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<210> 4429

<211> 842

<212> DNA

<213> Homo sapiens

<400> 4429

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tgaaaactca aaatgggaac ctgttaaatg ggaaaatgat atgcactgtg ctgttaagat 180
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cctgactgga gctgtagcaa ctataatctt acagggtggat agtgaggaaa acaacacaaac 480
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taaataatttg attaaaaagg gtttggcttt gagagaaagg agaattaata acttagataa 600
cagccattca ttatctgaga agtctctgga agtccccctg gaacaggaag attcagtagt 660
tactaactgt attaaaacta actttgacct tgacaagaaa aactgctgac aataatcagt 720
gaacagaaag tggctcctgaa tttcagggag aaaaattcta gaaccaaaga accactagan 780
ggggtataag nccaccaagn cttattccct aacaatgaac cgntattttt gagggcnaac 840
aa 842

<210> 4430

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4430

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ccgctcaaac ctccataatg gtctgcacca gccagatttg cctgccctca aaggcattcc 180
acctttgttc aggctctctt ccatacctga aattgccttc ctctaccaa ttaggaaata 240
tccatccttc aattccaaca tcttttgtga atatttacta ctactaagtt ccagagtaat 300
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 tagaataaag ggaatggntt ancaagtnga tattgaagga aa 702

<210> 4431

<211> 841

<212> DNA

<213> Homo sapiens

<400> 4431

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 aatgagtgtg gcaagaccgt tggtaaaaat tcacaccttg taattaaaag gtcaaaattc 180
 acaccttgta attcatagtg gagagaaacc ttacaagcac aatgaatgtg acatggtttt 240
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 cacgtggcac ccatactag aattcacact ggagagaaac cttacaagtg caatgagtgt 480
 ggcaaaccct ttagtgggca gtcaccactt attcaccatc aagcaatcca tggatataggg 540
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<210> 4432

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4432

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tataattcaa ggaagaccgc tgcctgctga tctgagggcc aaagtttgga agattgctct  180
gaatgttgca ggaaaagggtg attgtttggc atcatgggat ggtatttttag acttgccaga  240
acagaacact attcaciaag attgcctgca gtttattgac cagctttcag tgccagagga  300
gaaggcagca gaattacttt tggatattga atctgtaatt accttttatt gtaaatacag  360
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tcaactgcca cgcagcgatt tatacaactg cttttatgcc ataataaata agtacattcc  480
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ttgttaaata caaaaggaag ttattttaac ncaagaagtc aagacagcaa agaagaagtt  780
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<210> 4433

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4433

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aaaatttatc acacaaaaaa tgagttttat agaattgcttc aaaaaaagcc attaaaataa  120

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ccaaaactaa aaccaagagt ttgtaggaaa ataccaatat gcaaacattc caaaaggaga 180
gcctttatatt tgccagccaa ggtggtatta ttigtcttaa aaaaaaaatc aatgtaacat 240
tggttgctctt ttgagaaagt tccttgctgg gattcttttg ctggaaaatt ctcatgctga 300
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atcagttatc tgtaaataa tatccaactt ttctgaaagg aaaaaggtaa catgttaata 540
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tataatggat caagtaaaga gctgtcaaat aagattaaaa agactcacia ttattggaat 720
gttaaaacia aaccctaaaa ntgaangaaa accgttaaat aaangctaata taaggtaanta 780
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<210> 4434

<211> 232

<212> DNA

<213> Homo sapiens

<400> 4434

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cgcgcgggcc gccctccccg gcgcccgggt cctctccgag cccctgtcgg cgcggaaccc 180
tggcctcgtc cgcggcncan ctccctggag cctcncatca gcgggggcgc cc 232

<210> 4435

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4435

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tacggtgtgg tgctgtggac ttgtacttca cactttttgg cctcagtaga ccttcctggt 180
tacccttgcc agagcttggg ttggttctta atctaaagga gaaaaagct gtcttgaatc 240
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ggnangcgt ccactcccaa gtctttacta anggaatcta cagtctcaa acacagtgc 660
cancatcacc accatcacca tgnngcacaa gaaaaagaa 699

<210> 4436

<211> 851

<212> DNA

<213> Homo sapiens

<400> 4436

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gatatatattt ttgccatta ctttttagtgg caaaaaccag aattactttt gcaccaacct 180
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ggtatttagg tttagatgag gtcttaaggt tggagcccac atgatgtgat aagtgccctt 480
acaagaagag gaagagacac cagagcattc tctcaccctc cgtgtgcatg caccaaaaat 540

ggcatgtgaa cacagagaga ggaggcggct gcctacaagc caggaggag tgctctcacc 600
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 aaataaatgt ccaacggctt aaaccancca agtcenatgg gtataatggt tatggcaagc 720
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 atgccantcc nactataaag aacccaaaag ttccttgaag naaatgggct ggatttcang 840
 ggcaaaggac a 851

<210> 4437

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4437

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 ggagctccgg gtgccaataa aagattagga ctaacacacc ttcagtgttt gagtgatgtg 180
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 tattaaatat gacccttata caaattaaac aatggttacc gcatttgccc ctnaactcca 660
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<210> 4438

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4438

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<210> 4439

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4439

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<210> 4440

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4440

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<210> 4441

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4441

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tcacgagtac taccttggga atatgttggc caagaaacct tctaattgaa aaagaacgan  660
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<210> 4442

<211> 886

<212> DNA

<213> Homo sapiens

<400> 4442

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gcggctccac ggagctggtg gaagactcgc actattcgca gagccagctg gtgtgctccg  180

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<210> 4443

<211> 825

<212> DNA

<213> Homo sapiens

<400> 4443

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<210> 4444

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4444

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 aacacaggat tgggcaataa aactaacttt tatccaaaaa ggcaagaact ttncaaaaca 720
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<210> 4445

<211> 878

<212> DNA

<213> Homo sapiens

<400> 4445

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<210> 4446

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4446

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 gaagaggaac aggggggctt cattgcaaac ctgngcctg tcccctcctt gcctgattca 720
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<210> 4447

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4447

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<210> 4448

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4448

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<210> 4449

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4449

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ctgcaccccc agtgtatcag cacttcttaa attaaaataa tcttgccaac taatgtcttg  180
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ggctccccctt ttaccccata cctctctccc ccaaaaaagc ttggacagca accaaattgg 300
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<210> 4450

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4450

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 aatgccacca aggcattctt gtactgcctt cctctccctc cccaatcnaa gccaaggcaa 660
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<210> 4451

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4451

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<210> 4452

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4452

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<210> 4453

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4453

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<210> 4454

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4454

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<210> 4455

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4455

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<210> 4456

<211> 712

<212> DNA

<213> Homo sapiens

<400> 4456

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<210> 4457

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<212> DNA

<213> Homo sapiens

<400> 4457

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<210> 4458

<211> 860

<212> DNA

<213> Homo sapiens

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<210> 4459

<211> 763

<212> DNA

<213> Homo sapiens

<400> 4459

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<210> 4460

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4460

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caagctttta atgcttcttc tttatataac actggggatt caatcccagt cggncgcccc 660
anattgcttg gcatggagca agcttttagc cgcctcttcc tcagtggcat tatctaaggg 720
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<210> 4461

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4461

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gaaccctagc	cttcagctg	ccagggggct	taatgaactg	caaaggttcg	ccaagttgaa	600
gagtcctaac	cttttccaat	aatcatttag	gggacttccc	tctggcantc	tgcagtattc	660
caaccctggn	aaaagctgaa	cgtgtcctgc	aatngccctg	cgatcaatcc	ccgggaancc	720
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<210> 4462

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4462

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 tgaaaagtct ttgtgtttan tcccannant tatttanttt aagaaaagta agtttaaaag 660
 accttaagga cattca 676

<210> 4463

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4463

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<210> 4464

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4464

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gttctcaggg tttatattat ggaacagtag cttcaaatac ttgtcttat gacagtaatt 240
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ccatagatac atttggtaaaa gattaataat ttctctaaac taggctattg agaaaattaa 540
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tgaaataggt ggcgccaaga tggccgaata ggaacaagct ccagtctgca nctccanca 660
atgaacgatg cagaaagatg gggcgaattc tgcatticca anctgangga ccaagttcaa 720
cctcaccngg ggggcttggc aa 742

<210> 4465

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4465

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gtattggaac gagcaagaag gatgaatcgg acagattcag aaatatatga agatgcagta 180

gaacttcagc agttttttat taaaattcgt gatgaactct gcaaaaatgg agagattctt 240
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tccagttaag aaaattctag gcaagtgtgt gggcatgttt ggcaaaggaa tacnttaagt 720
tatgcccana anacttccgg agatgaggga ggttttggcc cggngaaatc caccgggaat 780
tccggccaaa aaccaan 797

<210> 4466

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4466

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gcagaagaga ggccagttcc aagcaggggc atagaacaga acaatctgca agggagttgg 240
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aatagtaaat ttttaataagc ccatgaactt gattatggct acctttattt taaacaagga 480
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taagaccgga ttaaaacatt ttnantcctg aaaaagcata anttcccttt gagcaagttt 720
gaaaaaaaaat gangtaattt taaaaattta aattgccaat aaaaatcccc caaa 774

<210> 4467

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4467

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atttttctgc acacggagtn ttngggaata agaaccggg ccaaacgctg ggccctcaac 720
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<210> 4468

<211> 840

<212> DNA

<213> Homo sapiens

<400> 4468

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<210> 4469

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4469

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 cctctagtag aaagatagca tatgcttggt ttgcttggtt gggttcatca tactctattg 360
 cttgggcaga agagcacata tgaagagaag agaaatggga aatggggaag acaacgcaga 420

gcaccatatac ttgggggtgta tatagaagct acaggacaag tgtaatTTTT atcattgcat 480
 ggggagcatt gacataatTT ctactgcagc tgagcattTT ttaatatgga taataggatt 540
 ctgcaagtga tacatttggt cagagaactt aataaactaa gtcaagtggg gatangtcct 600
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 tgaaatatgt tttgatcctt tggngaaacc tttttttca tttaaacctg gtccttaaatt 720
 cccagttatg ttcccagaac aatacaanaa atgtttaaaa tgttccaatt tgtaagaagg 780
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<210> 4470

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4470

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 catgtccaca attgcagctt tctatggcgg caagtccatt ctcatcacgg gggccacagg 180
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 gcttctctcc tgtacaaaca taatatttca ctgtgcancc actgtacgct ttgacgacac 480
 tctcagacat gctgtgcaac ttaacgtcac tgccaccgg cagctcttgc ttatggctag 540
 tcagatgcc aagctggaag cttttataca tatctctact gcctattcaa attgtaacct 600
 gaagcacatc gatgaagttt atctatccgt gncctgtggg agccanaaaa nntcattgat 660
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<210> 4471

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4471

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gttacattaa tacacagctt tttatgggat acagtaatgt aatatattag cctaattgtgt 120
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gaactagacc cagattataa gtcactccag aggtcccatt tttctggatt tgagggaaga 600
agtgtttgat gacaagtatt tgnagtgant ttatatccat tttcttttaa aaagtaatag 660
nttggaatt agntacntgt tta 683

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<210> 4472

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4472

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aatatttgaa gagttctcct tgttcttcag ccagttgtct caagtgccaa ttctacctct 180
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cccatgagat tactgcattg atatgatggg gctctcctgg ttactaatct taaactcctt 300
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ccaccatcca ccaccctgaa agtcatttta tgtctcctta tattattgaa cacaatgtct 420
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 cccacattta gggttangtcc tggcccacgc taccctttca taagtctacc aacactccac 540
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 gtacttcctg gcaaacacac atactttctt ctccaggata actcatattc aattcttgaa 660
 gacttgattc aagttttttc cccccggggg nccttccaaa aaccttcttc cccgggcca 720
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<210> 4473

<211> 516

<212> DNA

<213> Homo sapiens

<400> 4473

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 gaaggttgtc aatcaaggga ctgggaaaga ccttgatccc aacaatgtta tcattgagca 420
 agaagaaagg cggaggcgat ncttccagga ttacactggg caaaaagatt acccttgagg 480
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<210> 4474

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4474

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aaggtctaca tgattacctg aagtttaata ataatgcaag aagtgtttgt gggaagcaga  180
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gtaaacgcag tccttttcaa tacacaagtt ctataaccac aaaatttggg gactcaatct  720
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aaaaagggga aatggnncat ttccngggc aaatcaanan                        820

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<210> 4475

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4475

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aactaaggaa tgtaaagtga tttttccac atttcaaata ttccatggac acctatgttt  180
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<210> 4476

<211> 587

<212> DNA

<213> Homo sapiens

<400> 4476

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<210> 4477

<211> 628

<212> DNA

<213> Homo sapiens

<400> 4477

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<210> 4478

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4478

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 attgatgaac cattgcacat caagagaaga aaagttataa aaaccaggtt tcatacacia 660

gtccatggga aagtgcatac atcangacaa gcacangatt tgntaccaac ctgggaggcg 720
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<210> 4479

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4479

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gancaa 666

<210> 4480

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4480

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<210> 4481

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4481

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aataaaactt gcactcanc tccaagccca cgtgttaatc cgattcttta agtgtcacct 720
cccaaagtgt gaaaatgcat tgtctttctt ctttcccnag gccaatgggn cctcaaaaant 780
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<210> 4482

<211> 414

<212> DNA

<213> Homo sapiens

<400> 4482

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aaatgcaagt tttagaaaaa gaagtanaga agagagacag tgatattcag cagctacaaa 360
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<210> 4483

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4483

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acagaagctt atcagtaaca ctatttgatt gctttttgct gtgtgcacag gtgaggacct 180
gtctagactt ctatactatg tacattgtat taattttgtt cataaattag gtaattgagt 240
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caaactgtaa caacagtgct gggatttttg tatttaaaaa gggcagagta taccaagaat 360
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 taataaagca ctacataaat atgagctcat atcatatatt tgacagtagg gcattatatt 480
 tacaggttaa cattcaatta atctgactat gaattagaaa aatcttgaat ttgtagagtt 540
 catttaactt tattaaagca atttgccaac tcagctacag aaatacagaa aatattacta 600
 tctggagaac taccagtcg taagtttate ntcgttgaaa ttgcctaagc agaggattan 660
 gtggccaatc ctcaaggaat agtatacgaa ggnitccgc a 701

<210> 4484

<211> 854

<212> DNA

<213> Homo sapiens

<400> 4484

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<210> 4485

<211> 749

<212> DNA

<213> Homo sapiens

<400> 4485

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<210> 4486

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4486

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<210> 4487

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4487

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<210> 4488

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4488

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gaggaagaaa ttgttgagct tccagatttg gattacctgc gaacctgac tcatatagtc  180
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<210> 4489

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4489

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<210> 4490

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4490

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693

<210> 4491

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4491

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tttaa 725

<210> 4492

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4492

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<210> 4493

<211> 768

<212> DNA

<213> Homo sapiens

<400> 4493

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 acgttgcgaa cgcccttttg gcgttgggtgc tnggaggtgc tgggatgggc caagaanccc 720
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<210> 4494

<211> 541

<212> DNA

<213> Homo sapiens

<400> 4494

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 aagaacgggg ccctcaagtg caccttctcg gcacccagcc acagcaccag cctcctgcag 180
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<210> 4495

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4495

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<210> 4496

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4496

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 gcaaaccacc tcaacacact atccanggga taaaaccgc ttgctgctgc taaattatgc 660

caagagagaa cattctgata tttctcccca aattctaggc angcancgtt aacttggggc 720
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<210> 4497

<211> 355

<212> DNA

<213> Homo sapiens

<400> 4497

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gtccgggcgc cgcacgctga gccctccgcc cgcgagccgc gctcagctcg ggggtgatta 300
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<210> 4498

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4498

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atggaaatct agaaaagaca attcgaatat atagtggcaa aaagcagaag agtggttgcc 180
tggaaccagg gtgggaatga agattaactg cccagaggca taaaaaatgg ggtggtgggg 240
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aaaattaaga gcaaacagaa aaagcttaga ctaggaatct ttaatttgaa ctataattct 420

gtctactgtt tccactgagg tggctcttca gcaaatgact cagtagtttt aagcctcagt 480
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 atgatgaatg acctaancct taatgagcgc cctatgtgcc aagcactgtg ctgaatgctt 600
 tgcagaaaac gaaattcatc cttatcagat angttcctgg aacactggaa aagcactatn 660
 caaatgttag ttacaggga tccntgcacn ttingaagggg cctgttaa at tggtgaa 717

<210> 4499

<211> 685

<212> DNA

<213> Homo sapiens

<400> 4499

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 gttattttgt ggccttatcc cctaaaatat tttaggcatt accatatcag tttttatfff 120
 tatgtttatt tattattatt attttttgag acagagtctc actgtcttgc ccaggctgga 180
 gtgcagtggc ctgaacttag ctcaccgcaa cctccacctc ccgggttcaa gcaattctcc 240
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 tgtattttta gtagagtctg gggtttact atgtttggcca ggctggtctc aaactcctga 360
 ccttgtggtc caccgcctc agnctcccaa agtgcctggga ttacagtc at gagccaccat 420
 gcccagccta ccatatcagt ttttaataac ttgaactgaa attattggct tggnaatant 480
 tgggcaggcc attaattcnc attagaaant tacttaatat ttcaaaaaat tgactaaaac 540
 tggnaatctt tggggaggcc cattttgcaa gtggaaacct gtatttatca ttaagtttgt 600
 ctttaactat ttgttaacag attttaacag ttcaa atgaa anatgttaac ganatgcnnt 660
 ttgagtccgg ggataccnca ggta 685

<210> 4500

<211> 692

<212> DNA

<213> Homo sapiens

<400> 4500

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catttcggaa cgtacgtccc agccctcttt agctacttag cgcctctggg cccgagaaca 120
cctgctcctt ggctcagtct ggcgccaccg gcatcacgga actgtacttc ccagagacgt 180
cacaccggga gacttccgat tcccgtcttt gagattggac tctcacgtgc aggagccagt 240
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tgtatcagaa agcaaaggag aatgaaaaag cacagctaac attgcttgag gatctaggcg 420
attaattctt tagactgtca tcatgggtat ccgangacta atgagttttg tggaagatca 480
taagcaatga attcttcact gatttgaagt tgcgggacac aaaaaattgt caatgatggg 540
gtatgctcct ttccaccgt ctttgcctca agttcaaact tggatttccg gtatggangg 600
gacnatgatt cctttgcaga atgttgnca aaaaattctt tgaatcactg tttgcnttgt 660
aaaaaaatgc ccaaaatggt ggattaanat gg 692

<210> 4501

<211> 678

<212> DNA

<213> Homo sapiens

<400> 4501

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tctgcatgag ggtgatgggt ggagtcacaa tcctctatga ccatgtccac cctatgggag 120
ctttctgcaa gacatccaag atcgatatga aaggctgcat aaaagttttg aaggagcagg 180
ccccagacag tgtggagggg ctgctaaatg ccctcaggtt cactacaaag cacttgaacg 240
atgaatcaac ttccaaacag attcgagcaa tgcttcagta gagctctgct caaagaagag 300
gatctatgtg ctgacctcag aagatgtata tgtttacata atttaataca gattgatgtt 360
aatacttgtg tatttacata accgtttcct tcttgtcact gaaatatatg gaccttaatt 420
tgtatcctga ctgactcaac ccagcagagc ataaattgac ttgagagcct tacctttgat 480

gtctgaaatg aaacccccctt ctccaaaggc aaaattcgga gactttgatc ttgctactg 540
gagtccttta acaacaccta taacgataaa aaattcctaa ttgtttgtgg tagtatttta 600
attctanatg tgttatctct ccgggaagta tangtttata ggaaacacaa natanttgat 660
ttcccgtgt cngttcag 678

<210> 4502

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4502

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caactgttgt tatgtcagtc gaagacttag ccagctatca agtcatgatc cgctgtggag 180
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ggttttatct ctgaaagagg gtgctcgaga ggaagacctc gatgctgtgg aagcgcagat 420
tggtgcaag cttcctgacg attatcgatg ttcataccga attcacaatg gacagaagtt 480
agtggttcct gggttatttg gaagcatgac actgtcctaata cactatcggt ctgaagattt 540
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aaaggggccg aaacaaaaaa tgnagtttt tctaaccaaa tgtccaaacc aaatgggctc 720
caaatccaan ctgctatttg acatgggttt aataatang gngctacttt ttaccngacg 780
gggnttta 788

<210> 4503

<211> 857

<212> DNA

<213> Homo sapiens

<400> 4503

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aggagtcgga cctctctctc attattgccc agatagtcca aaagctcaag ggctccaatt  180
tgtactctca gctggaacgg caggcctggg ccagtcttca gagacctgag attaaacttg  240
aatcactgaa agaagatat aaggaattct ttaaaatata aggttgggag aagaaacttc  300
agaatgctgt ttatagttaa ctgagtgtgt ttcctttacc tagtcatcct gctgcacctc  360
ctgaacatct taaagaacct ttggtataca tgaggaaagc acagggaagt tgggaaaaaa  420
gaattttgaa gagtttaaat agtatgtgca ctgaactgag tatccactg gcacgaaaga  480
ggccagttgg agaacagaaa gaacttctta ataaatggaa tgaaatggga actgatgaac  540
cagatttaag ccttttcaga cctgtttatg cacctaagga tttcttgag gtattaatta  600
atcttcgcaa cccaaattat gaaaacggtg attctcccta gtttcaggga ctcatittggg  660
gtttaattca agttccactg aaaagtaaaa gacatccctt gaaatttgaa aagaatgcct  720
ttgtgggaac ttgggcttaa aattattagg gacaaactgg ggtatnagaa tgaattccta  780
cacaaagtng ccctcctggn aaactttttt gaaaaattgn gcaatgttac gntttttggg  840
gccaaaaaaa ggttcct                                     857

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<210> 4504

<211> 411

<212> DNA

<213> Homo sapiens

<400> 4504

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attaatatat gaagaaaact gaacagtcct taatctgtgt aggcattaca tccatttgta   60
ggaggtatit ggtgacttgg tacaggtttc tttgttttgt gtggtttgtt gaagatgcaa  120
tgaccgggat gaatgagtga acagctgggt gaggcagggg atgggcatta tgaagttggg  180
ggatatattg tagatgaaac agatgaccct aaggaggtaa tgaggggggt gactaaagaa  240

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tgacgaatgg gagaaggga aatattgaat tcattcttagc acaagtatat catcctttga 300
agaataatcc aaaacacatt ccagacatta attgtgaaat tcctgaaaaa tgtgggtgtg 360
cttaacatct cccangctat ggtgcaagca gagatgatan tgttgcttta n 411

<210> 4505

<211> 855

<212> DNA

<213> Homo sapiens

<400> 4505

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cgggagtgca ggcctgagtg ttccttcag catgtcggag ggggagtcct agacagtact 120
tagcagtggc tcagacccaa aggtagaatc ctcatcttca gtccttgcc tgacatcagt 180
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acaaccaatc ttcaatccaa gccacaaacg ggactcatca aagaattggg gtcctgttgg 780
gntccctggn caaccaattc aaacaaatca atggtgtaag aacctttttc caagaaagag 840
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<210> 4506

<211> 768

<212> DNA

<213> Homo sapiens

<400> 4506

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tagggtttaa cattgaaata aaatggatct gccagcaaag ggatggaatg tgggatggta  180
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ttcggcaaaa gcagaacaaa tatccgatac tatttttaac tcaaggaaaa tctgagattt  360
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atgattggat gcctgaacaa ccaaatatat tccaaagtgg gagcaattgg gaacgcctga  660
aancaaggaa ttgcccaaaa gccttaaaga anccgtgtttt ggggtcccca actgggttaan  720
ccgccttttg gtccctcca aacnnttttg nggttggggg ggaantcc                    768

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<210> 4507

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4507

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tggagggact cagaggtctc atggttcaaa gattcaggtg gttctgagac atgatctggt  180
tattctcttc tatccatta tcgctttaac tttattgtat ttttactttt tggaaatgag  240
aatagtgggt ctttgttact ggacccgtga ctttaaaaaa ggaagtctt tttatttatt  300
attattatta ttaattcaa tcctccaaga catcagaaaa aagagggagt tcttgaatat  360

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cttttggcctt agttattatt tgatttcata tatcatctca gatttaccta aacttggata 420
aatgtaattc atatacttat ttgataaaaa tgtcntttaa aaaattttta ttcaccaaac 480
tacttcagga aataaaatgt ttccttaaga aaaaatatgt ttagtaatgc gttttcncct 540
gaaaataaca gggtaaaaaa gntcncctta atggatgcca gggtaataag gcaagtttaa 600
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<210> 4508

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4508

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<210> 4509

<211> 840

<212> DNA

<213> Homo sapiens

<400> 4509

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cacgaagccc tcagcattat tgtggatgaa tataaggcac tactgcagtc ttcagttaag  180
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gangcaatga aaaagaacaa gagatgaatt tgatagagta tataaaagaa cagaaaaggc  720
tcgattaagt catcccgcc aagaagcctg tccagtttgg aactggtcct ccccngtgc  780
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<210> 4510

<211> 803

<212> DNA

<213> Homo sapiens

<400> 4510

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gtccgcgcgg ctgctgcgag cggatgatcat gggggccccc ggctcgggca agggcaccgt  180
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gaaactcatc ccagatgatg tcatgactcg gctggccctt catgagctga aaaatctcac 360
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<210> 4511

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4511

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aagggatatt ttatncctt tatttgggac gcttgtttct tcaagctcag tttaactact 660
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<210> 4512

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4512

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atgaagatga caaggaatct gagaaaaagg ggttgattga aagaatctat atggtacagg	180
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<210> 4513

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4513

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gcacctccgc ctcgccgccg ctaggtcggc cggctccgcc cggctgccgc ctaggatgaa	120
tatcatggac ttcaacgtga agaagctggc ggccgacgca ggcaccttcc tcagtcgcgc	180

cgtgcagttc acagaagaaa agcttggcca ggctgagaag acagaattgg atgctcactt 240
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 ggaaactatt gcaaaataag agactggatt tggatgctgc aaaaacgaga ctaaaaaagg 660
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 gtggaatttg atnggtcaaa gcaagaggat tancaagact ttctgcctaa nagggggaaa 780
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<210> 4514

<211> 832

<212> DNA

<213> Homo sapiens

<400> 4514

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 gtgacgggca gtgacagcna ggacnaggac naggaggtcg gcgagccgag ggtcaccggt 600
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ganggccctc atcctgggat ctgggagaan agaagctctc caaagcaa at tcaaanttgt 720
gcctccngaa gccaaagattg aaccgggggt ggggaacccc cggggttang taaaggggac 780
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<210> 4515

<211> 645

<212> DNA

<213> Homo sapiens

<400> 4515

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ggagtgaagg agcgggagtg gcagatggag tctctcattc gttacatcaa ggtgatcggt 180
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ccatgtacca anttacctgg ataagaaact gttcaaggn ancc 645

<210> 4516

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4516

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 gaggcctgat ncggcccaat gaacaaagtc ccccgatgct gataactggg naatcccgat 660
 gcctctactt tgcaactccg ggaaattcct cttaaaaggg tgcaattgca atggcattga 720
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<210> 4517

<211> 916

<212> DNA

<213> Homo sapiens

<400> 4517

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 ctaagtgctt ttagtaggta gcaatcaaat ggtgtaaata aggatgttct tttcctgttc 180
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 aaagcctttt taacaagccc ttcctgcaan ntgggtcccct taacccttg gccttggttac 840
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<210> 4518

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4518

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 cccttggtatt tcacttgcac tgtgcaataa gcaaagaagg gttgataaaa gttcttgatc 180
 aaaaagttca aagaaaccag aatttttagac agcaagctaa ataaatattg taaaattgca 240
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 aatttgaaca atgcatagat gatcgaaaat tacggaaaat catagggcag agagggtgtga 480
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 ttcctagctc aagcaatgag nctaaaagga gccttatgca tgatcttccc acatatcaaa 660
 attaactaaa agggcactgg aagtttggca atttttcctg ccttgctcct gccnaaganc 720
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<210> 4519

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4519

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agcaccatga gaatacaata gaatggtaga gtgactgact taagctaata ataacattct 180
aagattaatt gaaacataaa tgacccccag aacaaatatac tgagtgacaa aaattctggt 240
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agaatggaaa gaattttgag agtaaatttt ttgaatgtta ttttcctttt aaattggnaa 600
cttaaattgg gttatcctta aagacatggg tggggaacca ctggnanang gaaatcnaat 660
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<210> 4520

<211> 208

<212> DNA

<213> Homo sapiens

<400> 4520

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agtgactgcc cgggctgccg cccccggggg cttggcctca agctgcggac gacgcgggggt 120
ccatcagcgc gccgggctgc cgcctctcgg ncacggctgg gtcgggggcc tcgggctggg 180
gctgaggctg gcgctctang tnaaactg 208

<210> 4521

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4521

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 ggaataattt accttctgcc tgaaaggact ttgtcatttc ttttaataaa ggtctgctga 120
 taagaaattc attcaagttt ttgtctactt ggaagtattt atttcatgat cactcttaaa 180
 ggatattttg actgggtgta taactctagc ctgttaatta ttttttcaa gcactacaac 240
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 ccattatctc tttaaatata atttttgcct atctctcttc ttttgttgag gaccccaact 540
 tcccatatga tgaaatttct cacaattcna atttcngta tcncttggct gccctaagcc 600
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<210> 4522

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4522

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 gatgaaatga agaaaaaaat gtttaaggga gccagagaga aaggctcggtt tactcacaaa 180
 gggaagccca ttaaactaat agcagatttg tctgctgaaa ccctacaagc cagaatagag 240
 tggggggcca atatttaaca ttcttaaaga aaagaatttt cagcccagaa tttcatatcc 300
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agcgattttg tcactaccag gcctgcctta caagagctcc agaaggcagc actaaacaca 420
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 cccatctcac ggtgcaaaga cacacatagg gctcaaaata aagggatgga gggaatatatt 720
 accaagcaaa atgggaaagg gaaaggaaaa aaaagcaagg gggttgcaat cctaaggtct 780
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<210> 4523

<211> 575

<212> DNA

<213> Homo sapiens

<400> 4523

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 aatcaccttg ctgaggaagc ttttcgtctg ctgattcttc tttgtgacat cggggaataa 120
 ggatttattt ctaacagtct tgggggctcg tctgggatca cccagtctcc ttcgggtcgg 180
 ggtctctgat tcccgcctcc ccaccaaggg gaggcgcccc actgccttac tgcggtggcc 240
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 cagagcaaag taaagaaacg tcccaagggt gcgacaaagt acttgcttgg tggtcnggat 420
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<210> 4524

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4524

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aatctcattg tgctttttgt actgtgtagc ataataccaa attcctctat tcaactaaata 180
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atcacctgtc agggatttca agcttcccct atttgcaaaa tgggaagtan naaggctgtt 720
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<210> 4525

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4525

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aagatatgta ctgcaggccc agatagataa ggagagtgat gaagtgaacg aagggggaact 180
gaaggaaatt aagcaggaca tctcaagtct ccgctatgaa ctccttgaag aaaaatctca 240
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ccacttgaag ccatattatt ttctgattta ttttcttaag tgccaatggg cccacctttt 420
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 gcccagttgt ttggtgcttg ttttaaaaac tggctttctt ggatataact aactcctgtg 600
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 ttgaccacg tttacctccc ccatggcggg ttttttcct ccngaagggt ttattttcaa 720
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<210> 4526

<211> 541

<212> DNA

<213> Homo sapiens

<400> 4526

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<210> 4527

<211> 418

<212> DNA

<213> Homo sapiens

<400> 4527

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<210> 4528

<211> 590

<212> DNA

<213> Homo sapiens

<400> 4528

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<210> 4529

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4529

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<210> 4530

<211> 549

<212> DNA

<213> Homo sapiens

<400> 4530

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atactaaaat ggatcgtaag gataagctat ttgtgattaa cgaggtttgt gaaatgaaga  360
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<210> 4531

<211> 619

<212> DNA

<213> Homo sapiens

<400> 4531

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<210> 4532

<211> 742

<212> DNA

<213> Homo sapiens

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 aatattattt tagtcttggg gaaactaaat ttcaatttat taagtttttc attattcnaa 660
 gacttcttcc tttgtataaa ctacttgca anatgggntg aaaanatanc ttgaaatttt 720
 aatgaaaata gaaattcaag tg 742

<210> 4533

<211> 516

<212> DNA

<213> Homo sapiens

<400> 4533

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 gaataaaaac aggggtggagg ggacaggaat ggatttttga caaatttaac tttggtatca 180
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 aagtattaat ctgaaagtat taatgtntaa tacaggatga aacaaataag taactggtaa 420
 tgtcatggga ancaagattt tcagcaaaga aagntaaaat attaattgta ngggtttgca 480
 naacttattt aaaaccaaat ttggantggg aatatc 516

<210> 4534

<211> 368

<212> DNA

<213> Homo sapiens

<400> 4534

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ctctggatcc cgccggctcc ccaaggctga aggagacaag tctggatccg caggagcccc 180
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ggcgantg 368

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<210> 4535

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4535

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ccaaggctga ggagctggtg aatacagcac cactgactgg agtgccccag catgtccccg 180
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gcgcctcgtc gcggctgacc gtgtgggccc ccctgctacc gctgcgtatc gagctcaccg 420
acaccaccct cgagcaggtc cgcggttgga gggtacctgg ccctgctgaa gggcctgcgg 480

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aacccgctgc agaggcgctcg gatgaggccg anaggcgcg cctgtggctgc cacctgcagt 540
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 gccgcctcac gcacctgctt gggccccgac tggctgctan aacgtgtcca actccgtggc 660
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<210> 4536

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4536

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 agaagatccc cgaactacgg cgacgaggcc tgcctgtggc tcgcgttgct gatgccatcc 180
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 ctgttttcac accactgagg aggccaggca tgcttgatcc aaagcagaat gtttcacctc 360
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 ttttgaacat ttttagccat ggcgagctac ctctcattg tgaacagcgc ttcctccctt 480
 gtgaaattgg ctgtgttaag tattctctcc aagaaggtat tatggcagat ttccacagtt 540
 ttataaatcc tgggtgaaat tccacgatga tttcgatttc attgtcaggc tgcaagtgat 600
 tctagtcaca agattcctat ttcaaatttt gaacgtgggc ataaccaaag caactgtgtt 660
 acaaaacctt tanagattta ntcacccaa ccaanggaac tnggncacct atccactgga 720
 agtctgatga ta 732

<210> 4537

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4537

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 gatgctttta aaaagattgg aaatgcttat gctgttttaa gtaatccaga aaagcgaaaa 180
 cagtatgacc tcacgggcaa tgaagaacaa gcatgtaacc accaaaacaa tggcagattt 240
 aatttccatt gaggttgtga agctgatata actccagaag acttgtttaa tataatTTTT 300
 gggggtggat ttcttccagg tagtgtacat tctttttcaa atggaagagc tggttatagc 360
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 cagttgatgg tctctaattc tccttattcc ttatatccca gatctggaac tgggcaaaact 540
 attaaaatgc aaacagaaaa cttgggtgtt gtttattatg tcaacaagga cttcaaaaat 600
 gaatataaag gaatgttatt acaaaaggta naaaagaagt gtgggaggaa gattatgtga 660
 ctaatatcgc aaataactgc tggaaaagaa aggcaacaan nnacagatat gcagtatgca 720
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<210> 4538

<211> 645

<212> DNA

<213> Homo sapiens

<400> 4538

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 ctaaaggcag cccaggtctg gctaaagcgg ttcttggtat ggaaacctag gcccgcgagt 180
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cctgaagaga agaaagaggg agagaagagc gcctactctg tgttcaatcc aggctgtgaa 480
gccatccagg gcaccctgac tgcagagcag ttggagcgcg agttacagtt gagaccctg 540
gcagggagat angaccanc tgtgctgtca tgcagctaac ctctgatgtg gtcttcctca 600
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<210> 4539

<211> 507

<212> DNA

<213> Homo sapiens

<400> 4539

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gcggtgggca aggagggaac tcgagagcag cctccatggg cacacaggag ggctggtgcc 180
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tgctggacga tngctccctg gaggacttca ccgatttcca agggggcaca ctggcccaag 420
atgaccacc tattatcttt gnggcctcan tggacctgtc canattcccc angccgaggc 480
cttgctccat gctgactgca ntgggaa 507

<210> 4540

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4540

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agataagatg gcctgggaaa ccttttctga ggacatggct tttgaatgga ggctagaaag 120

atgagagaga cccagccata gaatgatttc agttaagagt attctatgaa gaaagagcag 180
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 gcttctaaga ttctttccag tggaatttca gaaattttgt gattctatctt cattaactcc 300
 tgaggtttgg ctacaagacc agaccctact ctgtttttat atgtgtagct ggcagaatat 360
 aggtttaata gtgagacaag accaagaact acatgccagc tccattgttc aatttctgtg 420
 tggctttaag caatttagct aacctctcca agtcttaaaa cagcatggct tcaaatacat 480
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 ggaaagaatc taagaagcta ttgcactggc ccattcaaac attggttaga gttgcatgtc 660
 ctgctgtgaa aagagagatg gcagagacct gtgcaagaaa ccnttgtaag acagatnagc 720
 aggaanctcc tgcctnccatg ganggtcaaa ggggtcaaatg tgtaagcag ttaa 774

<210> 4541

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4541

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 aaaaaggaca tcccagtcct ggtggccaca gatgttgcag cccgtggtct ggacattcct 180
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 gacagcaatt ttgctggtga cctgggtccg aacttgnag gagccaatca acacgtttct 360
 aaggaactcc tagatctggc aatgcagaat gcctggtttc ggaaatctcg attcaaagga 420
 gggaaaggaa aaaagctgaa cattggtgga ggaggcctan gctacangga gcggncctggc 480
 ctgggctctg agaacatgga tcgaggaaat aacaatgtaa tgagcaatta tgaggcctac 540
 aagccttcca caggagctat gggagatcga ctaacggcaa tgaaagcagc tttccaagtc 600
 acagtacaag agtcactttg ttgcagccaa gtttaagtaa tcagaaggct gggaaattct 660

gctgctgggg caagttgggg tgggactagt gcagggagct ttgaattctg tttccaanta 720
aactcaagca naacaggggc cantannagt 750

<210> 4542

<211> 608

<212> DNA

<213> Homo sapiens

<400> 4542

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ggaagcggcc gggctggatc aggatgagag atcatcttca gacaccaacg aaagtgaat 120
aaagtcaaat gaagagccac tcctaagaaa gagttctcgc cggtttgtca tctttccaat 180
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aattctcatc gagaatgttc actcagagat gtacagtttg ctgatagaca cttacatcaa 480
gagatcccaa gaaaaggga tttttattta atgcaattga aaccatgccc tatgttaaga 540
aaaaagcana ttgggccttg cgatggatan cangatagaa aatctacttt tgggggaaag 600
agtgggtg 608

<210> 4543

<211> 414

<212> DNA

<213> Homo sapiens

<400> 4543

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acctcctata atattgaaac agattctgtg ccctttaag gagataataa ctaacatctg 120

gggagcgctt tacaatttag aaaaggcctt tcacacacag gcctgtttca tcttcacaac 180
aatcttataa aacagatata ttgttcccat ttcccaaata atgaaacgga agcgccgaaa 240
atatctccta tagggctctt caaactgtgg tcaacttagt aaatgatgtt gacagtggaa 300
gtgtgatcat tttattttcc tgcctttgga attgaagatt gtaattttgc aaaaattttg 360
ttgaagatga tgtacctttg ggtcaganan ctggagtaca atggnacat ctca 414

<210> 4544

<211> 553

<212> DNA

<213> Homo sapiens

<400> 4544

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actccaagga accaagggtg cagcagctgg gcctcctgga agaagatcca acaaccagtg 120
gcatcagact ttttccaaga gactttcaat tccagcagat acatggccac aagagctcta 180
cagggtgtct tggccatggc gccctgggtg tgcaactcct ctccttcag ctcttggtg 240
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tctcagagaa atccaagctg caggagatct accaggagct gaccagctg aaggctgcag 420
tgggtgagtt gccaagagaa atccaagctg caggagatnt accaaggagc tgaccggct 480
gaaaggctgc aattgggtga nttgccaaag aaatccaagc tgcanggaga ttanccaagg 540
agctganccc ggt 553

<210> 4545

<211> 882

<212> DNA

<213> Homo sapiens

<400> 4545

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 tacaccgaag atgatttcta ctgccccgtc tgtcaggagg tgctcaaaac gcccgtgcgg 180
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 tgtaacngtg aaaagagaat ccctggttgg aacnttaacc tttttggtaa tnataaattt 840
 tggaattttt caataatnaa gttgcctttt gaaaatttgg ng 882

<210> 4546

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4546

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 atttagagat gtacaaaagc tgaccgaatt cactaccagt caaccacac tacaagaaac 180
 atcaaatgag tcctccaagc agaaggaatc caataccaga tgaaaatcca gatctccacg 240
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tgtccactct gacaaactga agatggggac tccactcanc ttcgccagcc acagnggan 480
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 cccctanttt tgtccttccg gggcctgggg tgtccccggg ggctcaaggg tgancgggga 720
 gaccctannt accgggn 737

<210> 4547

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4547

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 gcaactgggt ngaaaaanaa 740

<210> 4548

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4548

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<210> 4549

<211> 847

<212> DNA

<213> Homo sapiens

<400> 4549

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 ccaattgcat ttaanttttg gcaaggggca actccctgta naattcaaag ggcctggcat 780
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<210> 4550

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4550

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 aagtgggtgct gcaaaaccgt catgaangga caccctgcaa gcctgtnaaa nggaaggccc 720

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aag 783

<210> 4551

<211> 534

<212> DNA

<213> Homo sapiens

<400> 4551

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gatgtcttan ttagaaacca gattaataga anagtangcc tgatatatta catcatgagc 480
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<210> 4552

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4552

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tctggacaca aagnatctga cggtagaaga gntatttggg aactccttgc caaanggaac 720
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<210> 4553

<211> 636

<212> DNA

<213> Homo sapiens

<400> 4553

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<210> 4554

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4554

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tcatccactn gagttttgtna gaaaaaacng gngagca 757
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<210> 4555

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4555

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gatcctgccc ctaagactgc tgaccttgta gctattggag cagaatatga aggcacagta 180
caatttccta aagatgaaaa acagtatcat gttcccctcc atttttgtta ctacagagaa 240
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 caaagggtgcc tgggattcan gtgttgancc aacngcctg gcccggggat aacactttga 780
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<210> 4556

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4556

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 taatctggtc ccagggaatt actggtttaa ctgaacatct ccagaattat ttaagggtgc 180
 aaaatatata accttcacat tgaaagataa aatttatggg cataataaaa atttgaatca 240
 ttcaggtaat tttcaaaaaa tggagaccat ttgtctttta ctgaaggat atgtttaaga 300
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 tgtattatga tttattaact tgttgatgca tgtaaattgg gtgcattttg ttgcatgta 600
 tgttaaattg tgaccaatgt ttttacaag gaattgaaca aaaaaagtat cttttaanaa 660
 anaacganan n 671

<210> 4557

<211> 882

<212> DNA

<213> Homo sapiens

<400> 4557

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<210> 4558

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4558

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 aagatanccc atgtagactt tttctgaaga taccceaagt ggnnaagatt ttttaattagg 660
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<210> 4559

<211> 851

<212> DNA

<213> Homo sapiens

<400> 4559

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<210> 4560

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4560

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<210> 4561

<211> 692

<212> DNA

<213> Homo sapiens

<400> 4561

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 gaataacaca agaataacgg ngctanaagc ttccgggatt anttgtccaa ttccagttaa 660
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<210> 4562

<211> 682

<212> DNA

<213> Homo sapiens

<400> 4562

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 ccagtaatga tgaancaact ttatgaactc tccccatctc cggncataaga gattagccat 600
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<210> 4563

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4563

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<210> 4564

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4564

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<210> 4565

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4565

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<210> 4566

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4566

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 ataattttga agataaaaaac atcaanatat aaaagcaagt gctcccgggt gggactgtac 720
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<210> 4567

<211> 531

<212> DNA

<213> Homo sapiens

<400> 4567

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 caccacaacca ccccatggga tccccancc ctttaaccgn gcctgccttg tcccatgat 480
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<210> 4568

<211> 490

<212> DNA

<213> Homo sapiens

<400> 4568

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tttacaaggg

490

<210> 4569

<211> 546

<212> DNA

<213> Homo sapiens

<400> 4569

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atagcacttt	aaacaccatg	ttccctccta	ctgccaacat	gcttctccca	acaggtgaag	180
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ccatcagttc	aatgtctcag	ttactacagt	ctatgagttg	tcaaagctct	cacttgagta	420
gcaatagtac	cccgggggtg	tggggcctca	aatactgctt	gccntgctcc	gctaaccagc	480
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<210> 4570

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4570

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<210> 4571

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4571

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801

<210> 4572

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4572

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<210> 4573

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4573

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<210> 4574

<211> 422

<212> DNA

<213> Homo sapiens

<400> 4574

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ca 422

<210> 4575

<211> 513

<212> DNA

<213> Homo sapiens

<400> 4575

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<210> 4576

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4576

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 aacctggcaa cagagtgaga ctccatttca aaaaagaaaa acanaanaag aaataagaat 540

cactaactgc ncttatagaa attatgatat tcaagtaaaa taatgaaaat aaagcacttt 600
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 caatgataat ataana 676

<210> 4577

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4577

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<210> 4578

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4578

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<210> 4579

<211> 613

<212> DNA

<213> Homo sapiens

<400> 4579

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 aaacaaattt gatgtgtttt aaaagtgccg gctaaagtan aaagacatca ttaagaacaa 540

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<210> 4580

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4580

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ga 662

<210> 4581

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4581

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<210> 4582

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4582

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<210> 4583

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4583

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<210> 4584

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4584

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<210> 4585

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4585

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<210> 4586

<211> 902

<212> DNA

<213> Homo sapiens

<400> 4586

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<210> 4587

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4587

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<210> 4588

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4588

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 tacangttct tttccggtgt cacttttgta agtagcaact ataaacataa gttaactgtt 660
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<210> 4589

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4589

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 ttcactttaa tcagtttgct ttcagaacat aaactgcatt ctaaaccctg ttattttggt 660
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 gtaaagtgat attatccngt gggattta 748

<210> 4590

<211> 606

<212> DNA

<213> Homo sapiens

<400> 4590

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 gccaaagtgg gccttctctg gatcaggcgt cccctgaagt cggcacgccc ctctgcgtcc 180
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 cgaccccaag ttcattcacct accccttcga ccagaacagg atcgtccagt acaaagccac 420
 ttccttggag aaacagcaca aacatgacct cctgactgag ccagacctgg gggtcaccat 480
 cgatctcatc aatcctgaca cctaccgcat cgaccccaat gttcttctag atncaagctg 540
 atgagaaact tttggnanaa gagattcaag cccccaccaa gctccaagag attccancaa 600
 ncacgc 606

<210> 4591

<211> 654

<212> DNA

<213> Homo sapiens

<400> 4591

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 ctgcatcgcc aagcgtgggc anccgggaga tggccgaggc cttcgccggg gagatcctaa 600
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<210> 4592

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4592

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 tgtatcttgc acaagacttt tttgatagat ttatgttgac acaaaaggat ataaataaaa 180
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 ttctacctca gtattctcag gaaacattca ttcaaatagc tcagctttta gatctgtgta 480
 ttctagccat tgattcatta gagttccagt acagaatact gactgctgct gccttgtgcc 540
 attttacctc cattgaagtg gttaagaaag cctcaggttt ggantgggac agtatttcag 600

aatgtgtana ttggatggta ccttttgtca atgtagtaaa aagtncctagt ccagtgaagc 660
tgaagacttt taagaagant cctatggnag acagn 695

<210> 4593

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4593

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agcgcaccct ggttctgaac catctcttca nggntaaaga tttcctgaag gaancctcan 660
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<210> 4594

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4594

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gccgcgttg cgacgtgggtg cagcgcatac tttcacaagt gggctctccct tgtccggggac 120
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 gaccaatttg cagatcaagg aagagaaagt caaagcagat accaatggta ttatcaaaac 240
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 atacccccaa tgtctgtgcc tctccccaaa catatgaagc tggngcntca aacaaggaaa 660
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<210> 4595

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4595

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 gtttccattt cccatgtaat ttttaagttaa gctaaagttt taaagtggca gttttctgtc 180
 gatgactttt tcaagtgcta acactgtctc ttttgtgaaa atctggaaaa gtgctcatat 240
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<210> 4596

<211> 229

<212> DNA

<213> Homo sapiens

<400> 4596

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tcccccttct ctccctgcc ctcccccttc tccccctca ccgccagcg gggcttctaa 120
ctgacagttg tcgccgggcc ccgtccgtgc accgcctcct tctgccgtg tccccgcag 180
gtagaggggg gcgggagggg gtgtgagggg gaggagagag nnaatgana 229

<210> 4597

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4597

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tcatggatga aagaaaagga cattgttaag ctccctgaaa aactgctgtt ttcacaaggt 600
tgtaattgga ttcagcagta cagttttggn cctganaagt atacaaggct ccaatgttgt 660
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<210> 4598

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4598

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atgtgctctt aaacttgaat atattataaa cattgatcta gtgactaacc ttttttgtac 120
ttctgttgaa tgttgttcat ataactatat ctgttgcat aggagatggc ctgcttgcaa 180
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aagaagctga acatttgctt caggatgcc a ttaagaatgc caaatcaaat aatgaatcct 660
cattttatgc tgtcaaaact agcccgnat cttttcaaaa tacaagaaaa aaccttccaa 720
aatcaangaa anggggcttt tgggaagcaa tcccaaag 758

<210> 4599

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4599

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 gatgcaccac taaccaccat ggaaacaagg aaaaataaag ccagctcaca gggctctctct 120
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 aataaatgaa ttactcaatc tcctatgacc atctatacat actccacctt caaaaaagta 720
 catcaattat tatatcatta agggaaatag tancctctcn tctccaaata tgcattgacat 780
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<210> 4600

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4600

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 ttatatgtgc agattatittt ccttgggctt caagcttcca aaaaacttgt aataatcatg 660
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<210> 4601

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4601

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<210> 4602

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4602

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<210> 4603

<211> 810

<212> DNA

<213> Homo sapiens

<400> 4603

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<210> 4604

<211> 718

<212> DNA

<213> Homo sapiens

<400> 4604

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<210> 4605

<211> 733

<212> DNA

<213> Homo sapiens

<400> 4605

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<210> 4606

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4606

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cctacggaag aaagaaatac acccagacaa ccttggaccc aagcacctca gccgagacat   180
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<210> 4607

<211> 561

<212> DNA

<213> Homo sapiens

<400> 4607

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 gacaaatcat gttttgatga gcttacgttc tgtttccggg ttcancttct caatttagnt 540
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<210> 4608

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4608

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 gtcatactgt gtagaaattt cnattttctt tttccccatt anaagaggac caaacaattc 600
 tttatacaaa tggagtaagc aactagtttt gtagcactac atttaatggt aatgagatac 660
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 aa 722

<210> 4609

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4609

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 agctgcttga gagcaaagcc tgcctacagg attcctatga caacttacga gaaataatga 180
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aattatcatt acagtttgaa gaagataaag aaaacagttc taagccctgg tatacagtgg 360
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 agtgatcagt tccctggaaa agtctaagag atctgataag aaagttgtag cctgaccctc 720
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<210> 4610

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4610

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 tgcatttgca cataaaaagg cagacaacct ttctttgttt attttcttcc ctggtaggca 360
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 atccccactg tatagctgag ctagacacag tttctcctct ttgattatca tggacagttt 480
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<210> 4611

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4611

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ctaaaatgga ctggtcttgg gtgtgtaacc ccggtgaagt tatagcctcc ccaaattgag  180
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ggccagcctc tgtgccaccc agtacgacag aggagtggga actggccctc tggggctctg  300
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cccaccacat ttcatangag atgagttagg anatgacagc taactctctt aaggacattt  600
tgaccccagt ttatgttggg gatggccata aaggaaaatg tctanagata ggaaggtaaa  660
tcaantctgc caaccctac catcaggtct ggggccaccc caaactttgg gctgcctccc  720
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<210> 4612

<211> 706

<212> DNA

<213> Homo sapiens

<400> 4612

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ggtttctctg tttgaagggc tttaaactta taacaaagaa aataaaaatg acgacttcgt  180

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ctatcagacg gcagatgaaa aacatcgtga acaattactc agaggcagaa atcaaagtcc 240
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 cccaagctct caaaaccaa gagcgcattg gccaaatttc cactgggcat gggcagcaac 660
 cagatnacct ttgggcgaag ntccaancaa gcccaaactc tccaac 706

<210> 4613

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4613

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 atatattggt tcttgctaac ttgatctata atttcaatgc aatcccaatg gtataagttg 180
 gatgtttgtc tcctttaaat ctcatgctaa aatactattc ccagtgttg aggtggggcc 240
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 attcctttac accaaagcaa gaatggccaa gtacacccaa ccaatatccc agcaagttat 600
 tttctgcata ttgccaaact gattctaaaa tttatatgga gaggcaagag acaggatagc 660
 caacacaata ttgaagggag ggagaacata gttggaanac tgacattacc caacttcaag 720
 nactaattat taaagctaca ctaaatcaag acagntatgg tattggtgaa a 771

<210> 4614

<211> 549

<212> DNA

<213> Homo sapiens

<400> 4614

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ggccgggcta ggcccgtacg gcgcggggaa ggcagtcctgg aaaaggcgcc cgcggcagcg  180
cctcccagcc tgccgcccgg ctatgatgaa acgaaagtgc ggggcgcccgc gcggggcgaa  240
acggctcttc tggaaaacgt cgcgggtgcc ggtcccgggg ccctgctgcc ggggtgcccc  300
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gcttgccgtc agctgcggca tcttccgcac cgagtcgggg gcttgccgcc ggctccttct  480
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nctgtcacc                                     549
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<210> 4615

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4615

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gatcccagga agggcacacc ctttcctcac caccgagtg agcgtgccc cctcacagag  180
acctctttgc cccctgggcc aggcagagca ggcgctgcgg tccgggaggc cccatggagg  240
tggcgggtgcc cgtgaagcag gaggccgagg gcctggcgct ggactccccg tggcacccgct  300
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tccgccgctt ccacctgggc gacgcgccgg gcccgcggga ggcgctgggg ctgctccgcg 360
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 tgggtgctgga acagtccctg agcgcgctgc ccgccgacac gcaggcctgg gtgtgcagcc 480
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 ccacaggtgg aaaggaggac aattgggatg attcccttaa ggaacgcccc ttggggctga 660
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<210> 4616

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4616

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 tactgcccag caacatttga aacaggtgtt gggttatcaa atcatgtcag ggggcatctt 180
 cacagagcag gattaagcta tgaagccagt catgttgtat caccagaaca aatagccaca 240
 agtgacaaaa tgcagcattt caaaagaact ggcacaggaa cacctgttaa acgagttaga 300
 aaagctatag agaagtctga aaccacttct gaacacactt gtcagctctg tgggtggttg 360
 tttgatacta aaattggatt atcaaatcat gttagaggcc acttgaaaag acttgaaaag 420
 acgaaatggg atgctcacia atctccaatc tgtgttctga atgagatgat gcaaaatgaa 480
 gaaaaaatatg aaaaaatctt aaaggcattg aacagtcgtc gtattattcc cagaccattt 540
 gtagctcaaa aacttgcac aagtgatgac tttatatctc aaaatgttat acctcctgga 600
 agcataccgt aatgggctaa agactgaagc tctgtcagtg tccgcatcag aaagaaagaa 660
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 agaatcagtc nccttaaact catngaac 748

<210> 4617

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4617

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acatcaaagg agaagctgcc tttgccttca atggtggtga aaagataatg gcggggtgac 720
tcaaaatgtt ggtggtgcaa ggagctcaaa ttccatgggn ggncaacca aagatttncc 780
aaattatt 788
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<210> 4618

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4618

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catgctggca aggagctggg gttatgaagg gaaagagcag ggcacaaggc aagtagggct 120
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cgtgactttt cccctttcat tatgtgtgtc caccgagctg tcctgcttct gttttgtaat 180
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<210> 4619

<211> 615

<212> DNA

<213> Homo sapiens

<400> 4619

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<210> 4620

<211> 559

<212> DNA

<213> Homo sapiens

<400> 4620

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gtggacgtgg tgccggaggg gaagaaaata aagaaaacga acgcccttcg gccggatcga  180
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cccagcagca gcatggttta cggcatggag attttcagag gtacaggggc tactgttccc  300
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<210> 4621

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4621

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gctgtggcac tcggcaggtg gtgtttacta gtgacctca taaaagttac ctccctgtgc  300
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 gcgttccatt ccgcttgacg gaaaaaacgg ttttccctct tgctgatgtc agtcgcattg 480
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<210> 4622

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4622

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<210> 4623

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4623

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<210> 4624

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4624

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aactggaaaa ggactaccag cctgggatca cttatatgtt ggtgcagaaa cgccatcaca  180
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ggaccacagt ggacaccaac atcaccacc catttgagtt tgacttctat ctgtgcagcc  300
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gtttcacagc agatgagctc cagatcctga cgtaccagct gtgccacact tacgtacggt 420
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<210> 4625

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4625

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tatgatccac agaagacctg atttatgaaa ttttgtacta aaatcatttg gaaatgattg 180
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gttaataggg gggagtcctc nggatcttt 809

<210> 4626

<211> 607

<212> DNA

<213> Homo sapiens

<400> 4626

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ggctgttcac cctaattatt tctaactaat aggggctttt accctatatt ttctataggg  180
ttcgtgaagc atagtattct ggcaacctta aatccatcca agaagaaata agcaatgtgt  240
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cctgccacct tatttttaat gtaaactt gatccttttc agagcacttt cacatttgat  360
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tcggccttac aggtatttga cacctgtgtt gttggnccat ccacagctct attancagca  540
gnaggatctt atttggaggt tgaagtaggg aatggaagat cttatttgtg tcgaaagagc  600
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<210> 4627

<211> 829

<212> DNA

<213> Homo sapiens

<400> 4627

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aacaggagaa catacttcaa gaacgtgtta attccttaga caaagaggaa cagtacatgc  180
aatggaaaat aaatgaaact cttaaagaga tggaagagaa aaagaatgaa atcaccaaac  240
tccaggagca agaaaaggca ctctatgctg gttttcaagc agccattgga gaaaacaata  300
aatttgcaaa cttcctcatg aaggtcctaa agaagaggat taaacgggta aagaaaaaag  360
aagttgaagg agatgctgat gaagatgagg agagtgagga atcaagtga gaagaatcta  420

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 cgctcaagct ccaccaagat agagtatgtg ggaatttgn gaaataccta gcgatctttc 780
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<210> 4628

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4628

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 caagcgattc tccgcctcag cctcctcaag tggctaggac cacaaggcaa ccacgcacta 780
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<210> 4629

<211> 782

<212> DNA

<213> Homo sapiens

<400> 4629

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gtgcggaagg tggggggcgg cggcactgcc ggcggggacc gctgggaagg cgaggacgag 180
gacgaggacg tcaaggataa ctgggatgac gatgatgatg aaaaaaagag gaagcagaag 240
taaaaccaga ggtaaaaatt tcagaaaaga aaaaaatagc agagaagata aaagagaaag 300
aacggcaaca gaagaaaagg caagaagaaa ttaaaaagag gttagaagaa cccgaagaac 360
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aagagtcaga cctcgaatta gcaaaggaaa cttttggtgt taataatgca gtttatggaa 480
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tgctttgcag tgaaaaacag aagcaagaaa agcaaagcaa agccaaaaag aagaagaaan 720
gtgtggnctc tggaaggggg attaaaagcc accatgaaaa gatgatctgg caanattatg 780
gg 782

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<210> 4630

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4630

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accataaagt ccagtgaata tacaagaata caatgctgca ttacagaact ccaaactctga 180
aagtacctcc ctttatcatt cagttctcag atcaaaggctc atttctttaa aggtaatttt 240
ctgagttccc tagctaaaat atcacatcac taaccaattc agttcactct attttctgta 300
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agtgaacac ctaaaagaat acctggaaca tattaggcaa tcagtgaatt tttattgatt 480
gaaaccatag aatcaaaata gcttgatttc tagctttgtt gtttcatagt ctaactttag 540
acaaattatg ttctctgagc ttcattatct gctctgtaaa atatcttaag gcttgattga 600
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caataaaata tgtattttta gatgggatac cgcaattaat caagggaagt ctgtttacaa 720
agaaagnaaa tcaacggggg aaaccgggtg tccaaggcct ataatcccaa gcantttggg 780
gagggcanag g 791

<210> 4631

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4631

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gccgcatggt ggtgtcaata ttgatcccc ctgtgaattg gcttcctcct gggtatgtag 120
taaatcaaga caaaagcaac acagataaat gggaaaaaga tgaaatgaca aaagactgca 180
tgctggcgaa tggcaaactg gatgaggatt acgaggagga ggatgaggag gaggagagcc 240
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aggaacacat cagatttata gataatatgt taatggggctc aggagctttt gtaaagaaaa 360
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cctccttagg tagtatgcca tttcatcaa gattttgagg attttgacta cagctcttgg 480
gatgcaatgt gctatctgga tcctagcaaa gctgttgaag aagatgactt tgttgtgggg 540
ttctggaatc catcaagaag aaaactgtgg tggtgacacg ggaaagcagt ccatttctta 600

cgacttgac actgagcagt gtattgctga caaaagcata acggactgtg tggaaaccct 660
gctgggctgc tatttaacca nctgttgga aaangggctg ctcanctttt ccc 713

<210> 4632

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4632

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gtgggtgaac actgtgtatg tgaaaacact attatcttat gtagtcacaa gttagtcaat 180
gtcaacacac acatttcaca ttccattctt gtatgtacgt acttaaatag ctgaggtaag 240
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tgtatcttgg agtaactttg tttcacagtt aactcttggt tgaaagtatg agtgttaaaa 480
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aatgttggtt gacagacaaa aaaaaaata ggtttttccc catgtccaag tttaacacca 600
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<210> 4633

<211> 643

<212> DNA

<213> Homo sapiens

<400> 4633

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aagatcctgt tgtTTTTcat ttactataag tcctaagtca aatatgcctc acaccaagca 180
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cagaataata ctatcttcta ggctaaaact aattaattac tttcatataa tggacaggag 360
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ttatttatag ttttatatgt ataatcctag tttatcctga gatgtatttg cttttgcttt 540
ttaaacttat aatttaaaaa naaagagaga gagtcagaag gttgtttaga tggggaccat 600
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<210> 4634

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4634

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agaagagggt gttcacaaca ggtatccagc aatgaggacc tggtagaat ttttttttct 180
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gactttctga aagcacaggt tcctgctaca tgcaaaggna ttttgacact aattagacca 660
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<210> 4635

<211> 832

<212> DNA

<213> Homo sapiens

<400> 4635

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 aaggcgatg acgatgtttt tgtgaacacc atcacatcct ggaattactt tgaatagttt 720
 tatccaagac caaagccaaa agatttcttc aaangttgat gtgatccaca atgctgggac 780
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<210> 4636

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4636

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 aatgcagtgc acctcaataa tgtcagtgtt gtttctccaa gtcaatgtgc atatcaatac 720
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<210> 4637

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4637

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cttctatggg gaaatcctca ntgtggccat ttgttgggct acctgagacc aagaaaagan 660
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<210> 4638

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4638

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cactcacgtt agggctccag gggcctgcaa tacagcggtc gagagacaaa tatnaccag 660
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<210> 4639

<211> 543

<212> DNA

<213> Homo sapiens

<400> 4639

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 gggteccatc tgtagattct ttgcgccctt cccggctgct gcctggggcc ctttctctgt 180
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 ttagtatcgt ctttgataat attcaacatt ttcatgacct gggttatagcc ttgtctggtg 480
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 ann 543

<210> 4640

<211> 847

<212> DNA

<213> Homo sapiens

<400> 4640

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 aaaaaaattt actactatga acccccacaaa tattcagttg caagaaaatt tgattctaaa 240
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 catgtgctat gaaagcatac gtacaaagag aaaggggaaa gtgatttata attcctacaa 360
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 gaagtcagta gaacactgga atagggtgaag acctgacagt aatttttgtc ttaagaatgc 480
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 ttgcctctga tatttgaaag cacttttgta agttttgatg atgaaaaata tattaaacgt 600
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gtttcagaat taaaaataag cattatttca tatgggccaa tcagattcgt tacataggcn 780
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gagggcc 847

<210> 4641

<211> 855

<212> DNA

<213> Homo sapiens

<400> 4641

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cagaccattt accaaaagct catgtgcagt cactgtgtgg cactagattt cattttcaac 240
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ggactggagg aagtacagaa tataaatcgt agaaattccc cttatagtca gaccatgaaa 660
tcaagtgcag gcaaaataca ggtttcttgt tcaacaata cacacctagt ttcagagaat 720
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<210> 4642

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4642

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<210> 4643

<211> 715

<212> DNA

<213> Homo sapiens

<400> 4643

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<210> 4644

<211> 618

<212> DNA

<213> Homo sapiens

<400> 4644

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<210> 4645

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4645

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aacttgagat cttttggcct atgataatac cattaatttt tgcattgctt cagtttgcca 180
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<210> 4646

<211> 610

<212> DNA

<213> Homo sapiens

<400> 4646

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cacccctcac ttctccaggg aactgccaaa gccaaaccca gctcgggatg ggattatgtg 540
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aaaggcagaa 610

<210> 4647

<211> 705

<212> DNA

<213> Homo sapiens

<400> 4647

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aagagagtac acaaacaat ggaaaaacat tccatgctca tggataggaa aaatcaatat 180
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<210> 4648

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4648

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 aggtcttaga tgcaagctgc ttgttgatg tcttaagaat gtacagatgg caaatctcaa 540
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 tgagcggaga ncgccannct ccgggtcaca a 631

<210> 4649

<211> 877

<212> DNA

<213> Homo sapiens

<400> 4649

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 tttaaacata tgaaggata cagttacatt tttttaatga gaggaacaa ttgccgtagt 840
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<210> 4650

<211> 687

<212> DNA

<213> Homo sapiens

<400> 4650

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 taatagaacac accttgacca caagcccttg attgaacatt ttataatatt tcatctactt 180
 attaaaacaa ataatttccc ttgggttgga ggggaagtga tttcataaat taattagaaa 240
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 ctcttccttg ctctcaaaat ancctccggc ttgacaatt tgggncaaga ttcctgggtca 660
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<210> 4651

<211> 606

<212> DNA

<213> Homo sapiens

<400> 4651

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<210> 4652

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4652

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<210> 4653

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4653

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<210> 4654

<211> 581

<212> DNA

<213> Homo sapiens

<400> 4654

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<211> 666

<212> DNA

<213> Homo sapiens

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<211> 667

<212> DNA

<213> Homo sapiens

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<210> 4657

<211> 659

<212> DNA

<213> Homo sapiens

<400> 4657

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<210> 4658

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4658

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<210> 4659

<211> 660

<212> DNA

<213> Homo sapiens

<400> 4659

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<210> 4660

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4660

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<210> 4661

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4661

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 cctctgtatg tctcatggag gaattttaat tctgaaaaga aacatctctc ctgtcagang 660
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 atgtccntta aaana 735

<210> 4662

<211> 754

<212> DNA

<213> Homo sapiens

<400> 4662

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<210> 4663

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4663

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 aagtgggtgt gataaaggat aaatacccaa aggcccgtaa ccattggctg gtcctaccgt 660
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 atgcacactg ttgggggggg gnaaaaaaaaa aaaaaaa 757

<210> 4664

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4664

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<210> 4665

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4665

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<210> 4666

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4666

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<210> 4667

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4667

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 ccggcacggg ggcagcgtgc agccctgccc tgtcaggctg tcagacaagc cccggggggc 180
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cccatgtagt ggcgcgtgtc ctgagagaag tgccctccct acnangaggg aagaacangc 660
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<210> 4668

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4668

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tcttccaaa ncgagctcgc actgctcctt gggaatggtg cactttccag ttccagttgg 480
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<210> 4669

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4669

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atacactatg taaatatagt tcattaaatc attctttggt gtttgaagac tttctaattc 180
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<210> 4670

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4670

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 ctttgcctaa aacacttcag acaacacaac tatacagaag cttttgagtc actgcaaaag 600
 aaaaccaaga ttgactggg acatcccatg ttaacaagat attcaagaca aagctgggtgt 660

ttgaangggg attttgangc cntgcgaa

688

<210> 4671

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4671

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<210> 4672

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4672

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 ganaccatc actgggcatg attaccagta tnggataatt gcccaagcct gtgatcccg 660
 aaactcttat tggnttggca c 681

<210> 4673

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4673

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tatggatttt gcttatgtat gacaactcca aggaatcttg gnanagtaaa ttgctaaac 720
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<210> 4674

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4674

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<210> 4675

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4675

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<210> 4676

<211> 547

<212> DNA

<213> Homo sapiens

<400> 4676

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 gccgcgtgga gaacgcagga gggTccccga gtcctgagcc tgcgggcccg cgcgcgcgcg 180
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acactga 547

<210> 4677

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4677

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ttgactctcc aagacanaag gggagctc 688

<210> 4678

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4678

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 ctcggtatgag gaggtcattg cactggccaa gtctctcatc aagtcctgga agaagctcct 600
 ggatgcttcc gatgccaaag ccaggganeg ggggaagggc atgcctctgc ccacgtcctc 660
 gaagggatgc ctcaaaaggg cccgnttcc aaccgcaaga ggccgggagc tgcccaangg 720
 caaccgtcta ctccgangg attacaaa ttttccctcc gggggcctgg tcaacctgt 779

<210> 4679

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4679

cattgcaaat gtccttaatg ccactgaact gtacacttaa aaatggctaa gttgggctgg 60
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 tggggaatgg gtggaagagg cagaggtcag gcagagtgtt caataaagag gatcagacag 180
 gccaggtagg agaagctgat gcctagccta ggacagggca ggtagctcag caagtgtgag 240
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 ctaaaggcag ctgtgtgttt gcagggtcga ggaccaaagg gaggtgagt caggaaggca 360
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 gcgattggga aggtccacag caggactcca gctcatacct gggagtcagg gcaaagtcca 480
 gcctagggaa gagccccaa gagccaggct ggggtgtcagg tggggccctt gtcctgaagg 540
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gccacttctc tcttatggct ccctgtaaca atganatacg gacacctgna ggcacctggg 660
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tgactta 727

<210> 4680

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4680

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acaacaatat atatagagtg atcgtctctg cttgctgagc taacaggggt gtcaagcttc 180
cattttggta tctacttcta aatacactca gaacaggaga aatttggact aattttcaaa 240
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tgccctggca aacactggaa tcctactttt tctgggacct ttgacntcag tgacattgct 600
gtctatatat tcaataaaccc tcctattgat ctgttcaaaa gaaacangct gcatggggta 660
tgaaaaagct ggggggaaca agtcttttgg caacacaagg gaaannttcg taatcctttg 720
g 721

<210> 4681

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4681

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ccagacttca aatacaggca aagattagac atcgatttaa ctcatctgat agattcttgt 120
gtgaacaagg cgaaagtga agaaagtga caaaaagctg cagagttttc aaagaagttc 180
gatgaagaat tcacagctcg acaggaagct caagcagagc ttcaaaaaag agatgagaaa 240
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ccaccaccac cccttgagg agttcctcct ccccaggaa tatcactta tctaccttat 540
ggaatgaagc anaaaaaaat gtataaacct gaagtgtcca tgaagagaat caattggnca 600
aaagattgaa nccacagaat tatctgagaa ctgtttctgg gtaagagtca aaggaagaca 660
agtttgngaa tccaat 677

<210> 4682

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4682

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tgaggcgacg cctcgacgac agcggaccgg agctgcaggg gcaacacatt cagggcgggg 120
tgccccattt aggcctggct caccggagta agaaactaca acccccgaag tgccttgcgc 180
ctcaaggtta cggaggcagt gaccaccac cctggagcca tgggccacgc cttcctcatt 240
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cttctccgga aggaacagat tttagctgtg gccaggcagg tagagtcaat gtgtcggctg 420
cagcagcagg catctggccg gcccccatg gacctgcagc cgcaatcctc agatgagcaa 480
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gagccacgga cgggtggtgtg gctgggcgtg ctctcggtan gctttgccct ggtgctggat 600
gccatgagaa cctgctactg gctgagggca cgctccggct gctgacacnc ctccctccttg 660
acaactccgg ctgctggcgc ccagcaacaa ccttctgctg cgggctgacc gcattgangg 720
gnatcctcaa ccgcttcctg ca 742

<210> 4683

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4683

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cagtttaatt cacttaatgt gatttccttt ccttattgat aagcagactc cattgtagcc 180
agctgatatt ttgcatcag agatactctt gticcaccca gaggggccac tgaagattta 240
gaaaagtact catgatttga gatcaagtgt atctttgcct taaaaacaga atcacagata 300
ctgtgggcat cagctattcc tatttttgtc tgttctcctt ttagtggaaa aaggaattga 360
aaataatgct tgcagttcag aattttgatt taccatacta gattagctag aatcttattt 420
aataatttaa cttccttctc ctgtcatggt gctttgttat ataaaacact acttacttga 480
ggcaatagtc tcccaggag acaaatagaa atatagcttg ttgaatatct ttgatttctt 540
tcctaccgtc atagtttgcc aagatttctc agcagctgag gcagcggcac tgtggtgcgg 600
taaggtgttc tgatgtata agcagacacg ttgcaacat ccatctggag gagccctggg 660
ggcaaggatg tgggttgacc acccaggcaa nggatgccct gaatganang gccaacaagc 720
ctcaacaagt cccccaagca attttcaacc atccaagccc ctccaaaaca agtctcact 779

<210> 4684

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4684

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agcaatgggg ttcctgcagc tgctggctgt agcgggtgctg gcatccgaac accgggtggc   60
tggtgcagcc gaggtcttcg ggaattccag cgagggtctt attgaatttt ctgtggggaa  120
atttagatac ttcgagctca ataggccctt tccagaggaa gctattttgc atgatatttc  180
aagcaatgtg acttttctta ttttccaaat acactcacag tatcagaata caactgtttc  240
cttttctccg actctccttt ccaattcctc ggaaacaggc actgccagtg gactgggttt  300
catccttaga ccagagcaga gtacatgcac ttggtacttg gggacttcag gcatacagcc  360
tgtccagaat atggctatcc tactctccta ctcaaaaaga gatcctgtcc ctggaggctg  420
taatttggag ttcgatttag atattgatcc caacatttac ttggagtata atttctttga  480
aacgactatc aagtttgccc cagcaaacct aggctatgcg agaggcgtag atccccacc  540
atgtgacgct gggacagacc aggactccag gtggagggtg caatacgatg tctatcagta  600
ttttctgcct gagaatgact cactgaggag atgttgccgg aagcatctgc anaaggatgg  660
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<210> 4685

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4685

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aagaaatcaa aacattaata tatttcaagt ttggtaacag ctttgagtgt gaaaggggat   60
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tggttggttg attgataaac aatagaaact tatttctcac cattctggag actagaagtt  180
tgagatcagg gtgcccgcag gtcaggctct ggtgaggatc tgcttctggg ttgcagaatg  240
ctgacttctt actgtgtcct catgtggtga aagggtgagg gggctctctt ctctccagcc  300
tttcttgtaa gggcactaat cccattcatg agggctccac cctaatact tcccagagac  360
ccccaccttg tgatcccatc acctgaggg taggattcga acatatggat ttggagggga  420
ggagacacag acactcagtt cattgttctg gtgtgctctg accttctagg cttctctcca  480

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ttcaccttag aaccctact ctcttgctca gctccgtagt aagtttatga ccagtcaaag 540
 caattttgtg cagtgtatgc agaattttct gtgtaagcct tgcattcttt ttggagggct 600
 ttacagaaaa gggaaattac tcanaacaac ttcaatcact tgctacagtt aaaaataatt 660
 tcaccagaca tattaagaga agggtaaaaa ttagttccag aaggattttt tanattgcaa 720
 taaatcaaga ggaanaagnt ataatttcct aattttaaag ataagttttt a 771

<210> 4686

<211> 874

<212> DNA

<213> Homo sapiens

<400> 4686

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 atgccacaaa atgcactccc caataaatta agattaaagg aatgcccacaa ccccaaacat 180
 gatcattgtg atcatttctt atgaaacata agaatgagac ataagaattt tatatgagat 240
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 cagtggacta taatgctttt acacagccag aaaatagcaa tattcctaaa attaatgaaa 360
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 tgaaccagac tccccagtgc tctatagaac catgagtgaa gcagctctgg tgagaaaaag 540
 gatgaagcct ctgatgatgg acagaaanga aagacagaaa aatagagcct ctattaatgg 600
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 ttccctgttt cactaacaat accaccaat tcaattcaca anttaaagtc ataataataa 720
 cagttncatg tccaacatct gggggcactc tccatgtgca gatattaaag taaatggggt 780
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<210> 4687

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4687

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agatttcgct cactaataaa tttgattcat ttaattatgt gttttctctt cctagatTTT 120
aatTTgattt gaaaatgagt aagtgcagaa agacaccagt tcagcagcta gcaagtcccg 180
cgtcattcag cccagatatt cttgctgaca tttttgaact ctttgccaag aacttttctt 240
atggcaagcc acttaataat gagtggcagt taccagatcc cagtgagatt ttcacctgtg 300
accacactga atttaatgca tttcttgatt tgaagaactc cctaaatgaa gtaaaaaacc 360
tactgagtga taagaaactg gatgagtggc atgagcacac tgctttcact aataaagcag 420
ggaaaatcat ttctcatgtt agaaaatctg tgaatgctga actttgtact caagcatggt 480
gtaagttcca tgagattttg tgcagctttc cacttattcc acaggaagct tttcagaatg 540
ggaaactgaa ttctctacac ctttgggaag ctccaggagc ttttaaagct agtctcaanc 600
actacttaaa atcccatcng tttccctgtc aatgggagtt gggtaacgaa tactccgaat 660
ccataccatg aagcaaaatg acgacctcat gatgantaan gg 702

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<210> 4688

<211> 696

<212> DNA

<213> Homo sapiens

<400> 4688

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gttcgatgca ttgatgttga agtctcccac agtgaagggc ctgatggaag cgatatctga 60
gaaatatggg ctgcccgtgg agaagatagc aaagctttac aagaaaagca aaaaaggcat 120
cttgggtgaac atggatgaca acatcatcga gcactactcg aacgaggaca ccttcatect 180
caacatggag agcatggtgg agggcttcaa ggtcacgctc atggaaatct agccctgggt 240
ttggcatccg ctttggctgg agctctcagt gcgttcctcc ctgagagaga cagaagcccc 300

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agccccagaa cctggagacc catctcccc atctcacaac tgctgttaca agaccgtgct 360
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 accacggagc cgaagcctga gcccctcagg aagggtgcctt aggcctgttg gattcctatt 480
 tattgcccac cttttcctgg agcccaggtc caggccccgcc aggactctgc angtcactgc 540
 tagctccaga tgagaccgtc cagcgttccc ccttcaagag aaacactcat ccccgaacaa 600
 cctaaaaaan tcccatccct tctttctcaa ccttccatat ctatatctcc ccganttgg 660
 tggacaaaaa tgagctaacg tctgggggtg caanta 696

<210> 4689

<211> 567

<212> DNA

<213> Homo sapiens

<400> 4689

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 ccagggccac tgctcagccc ccagcccctc tcagcccaga ctctgggtca ccagcccag 120
 attctgggtc agccagccca gtggaagaag aggacgtggg ctctcggag aagcttggca 180
 gggagacgga ggaacaggac agcgactctg cagagcaggg ggatcctgct ggtgagggga 240
 aagaggtcct gtgtgacttc tgccttgatg acaccagaag agtgaaggca gtgaagtcct 300
 gtctaacctg catggtgaat tactgtgaag agcacttgca gccgcatcag gtgaacatca 360
 aactgcaaag ccacctgctg accgatccag tgaaggacca caactggcga tactgccttg 420
 cccaccacag cccactgtct gccttctgct gccctgatca gcagtgcac tgccaggact 480
 gttgccaagg agcacagtgg ccacaccata gtctccctgg atgcancgag cagggacaag 540
 gaggctgaac tccantgcac ccantta 567

<210> 4690

<211> 773

<212> DNA

<213> Homo sapiens

<400> 4690

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agcagtatat taagctctgg gtcttctcat gactaaaatg actatnttta aacataagac   60
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atntgttcta tactntntnt tntntntntt tntgagatgg agtcttgctc tgtcgcccag  180
gctggagtg c agtggtgcaa tcttggtca ctgcaagctc cgcctcctgg gttcatgcca  240
ttctcctgcc tgggccttcc aagtagctgg gactacaggt gcccgcctcg acacctggct  300
aatntntaaa aaaatatntt tagtagagac agggnttcac cgtgnttagcc aggatggctc  360
cgatctcctg acctcgatgat ccgcccgtt tggcctccca aagtgtggg attacaggcg  420
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aactntcatt aacctggata ttaatataaa ttacttcttg agtaatccca gaattgtaga  660
accaattggg agaatcagaa actgtccttg gacttgaggg tntcctcct taaggnaaaa  720
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<210> 4691

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4691

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aagaatgtct caggaggaaa catgacagag atgtntgtcc agttaaaact gggagatcag   60
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gcatgaggaa cgtctgggca cgtgtaaagt ggatatctcg gcactccctc tgaagcaagc  180
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tacacctgt gcgggggtct ccgtctctga tctgtgtgtc tgccccttag cagacctcag  300
cgaaagaaag cagattaccc agcgatattg cttacagaac tccctgaaag atgtgaaaga  360
cgtcggcatt ctacaagtga aggtntntaa ggcagcagat ctcttagcgg cagatntctc  420

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agggaagagt gacccatfff gcttggttga gttaggcaat gaccgacttc agacgcatac 480
cgtctacaaa aacctcaacc ctgaatggaa caaagttfff acatttccca ttaaagatat 540
ccatgatgtt ttggaagtga cagtgtttga tgaagatgga gataaacccc cagattttct 600
tggnaaagtt gccaatccct tgctgtccat tagagatgga caaccgaatt gttangtact 660
aaagaataaa gatttagaac aancfttttaa aggag 695

<210> 4692

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4692

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cccctggagg gaactcatct aatgggtgtg aaagactcta acatccatga gcttgaacat 120
gagcaagagc ctacttgtgc ctcccagatg gctgagccct tccgtacctt ccgagatgga 180
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acacctacca agatacctga aattacaact gaaatacatg tctaattgggt ctaattctgc 600
taatattgtc ccggagacaa ntctgaatc tgtgcccata atctctgtca ntctgtgtt 660
tgcangcgtc atgctgctaa aaa 683

<210> 4693

<211> 604

<212> DNA

<213> Homo sapiens

<400> 4693

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accccggtag taaatcatgg ggctggagct caaccccagg gtaggctggc tccagagctg   180
tgctctcctt gactcttctg atggctctct agctggaagc ctcacatttc agtctcattc  240
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tcttctcgac cgagtgc aaa aattatcccc tccataccag ctttgatgac cttccttcca  420
tactcctcac cagacacaac ataataggtc acacactcct ctgtgctttc tggcacgttt  480
taaacattag tattattgac ctttacctat agtatancat ggnctattta tgtatccatc  540
tcccctangc atttttcttc aaagacaaga accatgtctt acccatctct tgggtaagtg  600
ccta                                                                    604

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<210> 4694

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4694

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ggatgttctg ataaatggag caccgcgacc tgccaatttc aaatgtaatt caggttacgt   60
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agctcttcgg cttgcaacaa ctatgacgaa tcatgaaaaa acgaacggat taacagggtc  180
attcaagagt taggtctgga taaagtggca gactccaagg ttggaactca gtttatccgt  240
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tccatcttgt tcttgatga gcctacaact ggcttagact caagcacagc aaatgctgtc  360
cttttgctcc tgaaaaggat gtctaagcag ggacgaacaa tcatcttctc cattcatcag  420
cctcgatatt ccatcttcaa gttgtttgat agcctcacct tattggcctc aggaagactt  480
atgttcacg ggcctgctca ggaggccttg ggatactttg aatcagctgg ttatcactgt  540

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gaggcctata ataaccctgc agactttcttc ttggacatca ttaatggaga ttccactgc 600
gtggcattaa acagagaaga agacttttaa gagatcatag agccttccan gcaggataag 660
ccactcatag aaaaattanc ggagatttta tgtcaactcc tccttctaca nagagacaaa 720
agctgaa 727

<210> 4695

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4695

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tatgtgcaca atgagctagc caacatggaa gaagatgcca gatcagctgg agtcgctacc 180
tttgttctcc aagaagaatt tgatagatat tctggctatt ggnggtgtcc aaaagctgaa 240
acaactccca gtggtggtaa aattcttaga attctatatg aagaaaatga tgaatctgag 300
gtggaaatta ttcattgttac atcccctatg ttggaacaa ggagggcaga ttcattccgt 360
taccctaaaa caggtacagc aaatcctaaa gtcactttta agatgtcaga aataatgatt 420
gatgctgaag gaaggatcat agatgtcata gataaggaac taattcaacc ttttgagatt 480
ctatttgaag gagttgaata tattgccaga gctggatgga ctcctgaggg aaaatatgct 540
tgggtccatcc tactagatcg ctcccagact cgcctacaga tagtggtgnt ctcacctgaa 600
attatttacc ccagtagaan gatgatgttn t 631

<210> 4696

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4696

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ctagaaatgt gaagaatgtg acaaagcctc taaatgattg tcacacttga tcgtagggcc 120
cagacagaag agaagagtca catcatctag atgatgaatg aaaagatatg tcattattct 180
cctttgggca gtgcttctgc agaaaagttg caccttctag gtgttgact cagcaatata 240
tcacaatgtc tgcagtatit tggaaggaga ggagagtcac cattacttag gtgctaggcc 300
cagcaatata tctcaagcac ttcttgggca aagcccaagc agtaaaaaag agtcacatta 360
cctaggttct gggtatagca atatgtcaca aatgcccta agaagagggc ccaggaaaag 420
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cccatgatg ataggcccag agacatgtca caatgacctc tttaggcaag aggaccaggc 660
aagaagaatc acatcacttg tgtgctggcc ctagtgagaa agtcactccc aattctgtgg 720
acatgggncc angcaagaag agcaangtca catttcttaa gcgctgggtc caagagatat 780
gtcacaacc ttttacia 798

<210> 4697

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4697

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ggcggctagc tgagttaatg ttagctaaac atgtatagac atagaaattt tgaattgctt 540
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 aaaaatttca tatgcaaata gctccttaca agatagcagg cangaattcc acatcttaca 720
 ctatccaacc tcagagaaac tgttcattcc attcacgttt ggtaaattggg gnaaaaaaag 780
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<210> 4698

<211> 827

<212> DNA

<213> Homo sapiens

<400> 4698

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 ttgagttttg agagggtttt tatatatacct agataaaatt cctctgtag atatgtgggt 180
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 ggttaaaggt cccggctact aatgaacca aacttttttt tcccccttt tgactccttg 780
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<210> 4699

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4699

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 ggaaaaaact caaactctga tctacatca ttgtttaatg ttcggcaaac atgaagcatt 180
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 aaccctgcc cagagggtta ctgctaaaat gaaactcccg tgtctgtccc cttccctggc 660
 ccccaactga cttgcctgcc tctgcttgct gctgtccctg cctattcccc ttcatgccng 720
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<210> 4700

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4700

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 atacagaaat ggaaaaccaa ataccacgtt ctcacttata agggaaagtg aaacactggg 180
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 taggtcagcc tctttgttat agcagatgat actttttata tggnttagca aaggagtcag 720
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 a 781

<210> 4701

<211> 754

<212> DNA

<213> Homo sapiens

<400> 4701

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 aactgtgtgg ttgggctcgg tagcacatcg tgggacttgg gtgtgcgccc acagatggtt 180
 tggccctgca gtgaccagag cagcccaagc cgccaccatg gtgaaattgc tagtggccaa 240
 aatcctgtgc atggtgggcg tgttcttctt catgctgctc ggctccctgc tccccgtgaa 300
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 ctctgatgca ttttcaacac tgatgccaag ttcagtgaag gccttgatgc tgtaagggtg 540
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 gctctaccgg ccaaacaagg ggtttggacc aaactgggat tcccaacagg tggacttgct 660
 ggttgtcacc tgataatcag nncaaactan ccacctaggt aagggaaaac tctgtcctga 720

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754

<210> 4702

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4702

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gatgctggag	attacagaga	cactcaagat	gcccttgctg	ttgttataga	ggtagccaac	180
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gaagcgattt	ccagggaat	agaagagtat	gccaaagaaa	gaatcacctt	ctgtcctagt	600
aggagtcttg	atgaggnaag	actcagaaaa	taaagaagaa	agttagtcct	cctggntnga	660
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<210> 4703

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4703

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 aaaggccttg cgtctcaacc ttgttggtga aaaactgcaa tggtttcaaa atcatcctga 300
 tcccccaaaa aagagatatt caaagaaaga tgcttgtgaa ctaattgaaa ggtacttaaa 360
 tcgattcagc agtgagctgg agcagattga gttacataac agtatcaggg acaggcaggg 420
 gaggcggcac tgttcccggg agaccgtcat caagcagacg atggagcggg agcgacagca 480
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 taatgatgca attcccaaga cgtgcaagag gaaaactact ataactgtag accaagattt 660
 gggggaattg gaactaaacg atgaatcaag tgattcagat tgaggaaatg actgcaatgg 720
 cctaaattgt cctcacttga attgaaaata aataatttga gagcntcaaa ttatantcat 780
 tgattangg 789

<210> 4704

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4704

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 ggctggggcc ggcccaggag ctccccagg gctcccaccg tccatggcgg tgcgggggga 180
 gcccgcattt ccctgtcctt caccacgcgg agctgcccac cccctggagg gtcttgggggt 240
 tctggaagaa gcagccccct actaggcgga aatgggaagg ccaccatgca gaatctcaac 300
 gaccgcctgg cctcctacct ggagaagggt cgcgcccttg aggaggccaa catgaagctg 360
 gaaagccgca tcttgaaatg gcaccagcag agagatcctg gcagtaagaa agattattcc 420
 cagtatgagg aaaacatcac acacctgcag gagcagatag tggatggtaa gatgaccaat 480
 gctcagatta ttcttctcat tgacaatgcc aggatggcag tggatgactt caacctcaag 540
 tatgaaaatg aacactcctt taagaaagac ttggnaattg aagtcgaggg cctccgaagg 600

accttagaca acctgaccat tgtcacaaca gacctagaac angagggtgga aggaatgagg 660
aaagagctca atctcatgaa nggagcanca tga 693

<210> 4705

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4705

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gccggaactg cggcagtcct tccctgccag gctcttcac ccaaggtttct gtggatccct 180
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caatcaacta tgctaacaga ggctactacc tctaacagtt ctcttgatat cagtgcctata 540
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ctaagaatga aagaaaaagt actgcgtgac aagcaagaac agccatcaag aaacagtagt 660
ttgttgggan cacaagaaaa agtgggaata atgaaacctt cactcctaaa cangagggtg 720
aaaaaaaaaa attgcagcat acctaacata tgtgaagaaa angggaaaca acaaatcaat 780
tccagncaag atgac 795

<210> 4706

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4706

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gaagtaaadc ttttaattga atttgatgac acctgttttc attttgttcc cccggcaaca  180
ctgctagtac caaaattgcc catagaccac cctgggtttt gaaaagaatg aaatcattct  240
gttttttaaa aattttatcc ttttactgac taaatattta aacagggtta taaaacatct  300
gtcagagttt gtgaactcat gttggagtaa aagagtttag gacacataat tggaagtttt  360
gcatgaaaat tcctgagtag ttttagtttg tctttcttag ttatgctgaa gtttttatta  420
gaattataat tagaaattag aaaagtaatt gacagcaaca atggaaaaaa tatctggact  480
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gttacctgtg tgagactcct gtgagagaga ggtaaagctg acacaaatgt tatctttcct  660
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<210> 4707

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4707

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 tgtctcctgt caatgctcca agcaaggggc aaaagccgga catctccaac aaatnccgag 780
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<210> 4708

<211> 462

<212> DNA

<213> Homo sapiens

<400> 4708

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 gcctcggagg ggccctcggc tgccccaccc tcggagccac tgctagaagg ggccgctccc 180
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 gtgaccgtct ggctgctgga gcanaagctg caggtctgct gcanggtgga ggaggtgtgg 420
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<210> 4709

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4709

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<210> 4710

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4710

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 aagacaaatg tgagagatgt ctgcgtttct cctattaaat aatattacaa ttggnatgtt 720
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<210> 4711

<211> 685

<212> DNA

<213> Homo sapiens

<400> 4711

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<210> 4712

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4712

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<210> 4713

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4713

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cgcgccgcct gggagctgga gcccgcgcag cgccccgcag ggcatggac ggccgaacct 180
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<210> 4714

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4714

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 agccctggaa gattcggaaa aactggcct ctactaactg gtgactcctc tccaaaaagg 720
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<210> 4715

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4715

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<210> 4716

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4716

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gcctcatcga caaagtcgac aacttcaagt ccctgagcct atccaagctg gaggaccctc 180
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<210> 4717

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4717

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<210> 4718

<211> 846

<212> DNA

<213> Homo sapiens

<400> 4718

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<210> 4719

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4719

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<210> 4720

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4720

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ttttctcaan aaggtagaa agcagcattt aaggaaggtc ttctgggaag ccttaacaaa 720
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<210> 4721

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4721

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ggagagtccg ttggnatcat ctggcaagaa caaatcctat gatgtgcgaa ttgagaactt 660
tgatgtgtct tttggcgata gagtactgct ggctggaagc ngatgtnaaa cctgggattn 720
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<210> 4722

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4722

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 accacttcta aatgataaga atggtacaag aaacttccag gactttgact gtcaggaaca 180
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 ggcagcttcc aaactctctg gcctgacaac caatgttggg ggacattatt ttggctcatc 660
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<210> 4723

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4723

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 agcgtttaca gacaantgag aggatattct cccagcanct tcagaacaag actttcttcc 720
 cggaccaaaa cggt 734

<210> 4724

<211> 899

<212> DNA

<213> Homo sapiens

<400> 4724

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<210> 4725

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4725

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<210> 4726

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4726

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<210> 4727

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4727

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 aaccaagcat taatcttaaa acactagagg aggctgggca cgggtggcgc acgcctgtca 720
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814

<210> 4728

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4728

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<210> 4729

<211> 862

<212> DNA

<213> Homo sapiens

<400> 4729

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<210> 4730

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4730

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aggcattttt tcacacccag tcaagtgtac gccactttgc cctaaatgtc attgcattga 540
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 caagacccag aacctgctat gcggaacaag ggtgatcagc aacttgtggg aatagacaaa 660
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 aca 723

<210> 4731

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4731

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 gtcgcctcac ccgggaagcg caaggggtca gggaactccc tcccctagcc aagggaagct 180
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 agtttcccc tcacaagtgt aaacaaagct gctgggaagt ttgaactggg tggagcccac 660
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 gcatctctga aacnaaggna aca 743

<210> 4732

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4732

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ttgccatttc cctgtggctt tgtttacact atgaagggga aaaccacctg ctcaagcctc 660
aagtaatgn nggatgcccc tcccccgagg gcaaagcttt gagcatccca aggtcgattt 720
taanactggt tgttgctggg 740
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<210> 4733

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4733

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tgtatttggt tttgacgtag aggtttcaat tttttcacct tgggggcaaa tgaaaaactt 180
ggcatttttc atttgggaac atataatagc ttgtaaactt ttcagacagc agtaaatgtc 240
tgaaaaaata tcaaaaacag cataaagaca agattatgta gctctaatta tacgtatata 300
attataaaaa acaatgtgca agggttatat tttaaggctt tttaaaatct gattttgatc 360
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ataccaaag acataatatt ttttatggta gccttttact ttcaagactt aattttcaga 420
 cttgtacaag ttccttctta cattctttcc ctctcacacc atcctactgg agaaagcata 480
 cttttatgct aagatcttac ttttaagcttt ttatgtgaac aaaagatgta catatagtaa 540
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 ttggaaaaca gcactacgct tagttttcct gtagttcctg agtgatgtct gtgtgttcct 660
 tgcctgccct tttttgtgag cacagattan tcngttatcc atggctggca cttcacttat 720
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<210> 4734

<211> 875

<212> DNA

<213> Homo sapiens

<400> 4734

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 ctacaacagc agtgctcttg ttaatacagg tctctggttt atgcagaaat ggaaaaaatc 180
 aggttcgctt ttgcagctga catgtcgaga tcaactcagac cctcgccaaa cttttttata 240
 taagcttagt aacaaagcag ggcttcatta tttcaaaaat gttgtgctag tgggatccct 300
 acaggatcgc tatgttcctt atcactctgc ccgcattgaa atgtgtaaaa cagcttttaa 360
 ggacaaacag tcaggacaga tctattcaga aatgatccac aacttgcttc gacctgttct 420
 gcaaagcaag gactgtaatt tggttcgcta taatgtcatc aatgcattgc ccaatacagc 480
 tgattcactc attgggagag ctgcacatat agctgttctt gattcggaaa tttttttaga 540
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 tgataagttc taagaaatat ttataccttt ttatatggaa gataatttat atcatccatg 720
 tttagtgtt ttttaacatc aactttactt tccaggtaat gtggctgtgc aataattttt 780
 taattttacc tttttacttt tccaataacn ttttcaaaaa attttggcna cctaaggtaa 840
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<210> 4735

<211> 846

<212> DNA

<213> Homo sapiens

<400> 4735

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attacctgaa gcgcattcag acaacgtggc tacctttatc atttcattca accctgagtg  180
gccccaaaca aggccctcagg ccggccactt ccttccactt cttggtctga cctctccatg  240
atctgttact aggcaaaaact cagatgtttg gctaccttgg gctgcaactg tcccactctt  300
gcccaggctt gctggagttg gggttatcca cagtcagagg ttcagagttg tcaaattctc  360
caattagagc aagagatgag gaaaggaaaag ggagacgaaa gaaagaggct gtgcctcaga  420
aataataacg ccgcataatc acaactatct gatctttgac aaacctgaga aaaacaagca  480
atggggaaaag gattccctat ttaataaatg gtgctgggaa aactggccaa ccaatgtaga  540
aagctgaaac tggatccctt ccttgcacct tatacaaaaa tcagttcaag atggattaaa  600
gacttaaacg ttagacctaa aaccataacc taggcattac cattcaggac ataggcatgg  660
gcaaggactt catgtctaaa acaccaaaac caatggcaac caaaggcaaa attgacaaat  720
gggatctaat taaactaaaa gagcttctgc acagcaaaaa gaaactacca tcagnagtgg  780
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<210> 4736

<211> 890

<212> DNA

<213> Homo sapiens

<400> 4736

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 ggttaaaaga aaaggtccat ccacatcgtg gcgctgggga acgaggggga cacattccac 180
 caggacaacc ggccgtcggg gcttatccgc acttacctgg ggagaagccc tctggtctcc 240
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 gagtatcagg ccagtgcgtt tgggaatgtc aagctggtgg tccacgactg tcccgtctgg 360
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 gtgatcaaat acaacgttaa tgacaagttt tcattccatg aagtaaagga taattatatt 480
 ccagtataa aaagagcatt aaattcagtt ccagtaatta ttgctgctgt tgggtaccaga 540
 caaaatgaag agttaccttg tacatgccc aatgtacct cagacagagg gagctgtgtt 600
 agtacaactg aagggatcca acttgcaaaa gaactaggag caacctatct tgaactccac 660
 agccttgatg acttctacat aggaaagtat ttggaggag tgttgagta ttttatgatt 720
 caagccttaa atcagaagac aagtgaaaaa atgaagaaaa gaaaaatgag caactccttt 780
 catgggaatt agaccacctc aacttgaaca ancangaaaa aatgcctgtc ctaaaggctg 840
 aagcgtcaca attataactc tgacntaaat aacttgctgt tctgctgcca 890

<210> 4737

<211> 894

<212> DNA

<213> Homo sapiens

<400> 4737

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 tggcttagga gagggaaaac tttaaaacta atattctctc taagaaaaga aatggaagcg 120
 ttcttggttt cagtaggggc aacaacagtc cacttctcag acaaacaatg gctttgtgac 180
 tttggcttct tgggtggacat tatggaacac cttcgagaac tcagtgaaga attacgagtt 240
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 ttatttcaaa gacatattga ggaaaaaaat ctaacagact ttcctgccct cagagaagtt 360
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caaatggtga tctgtcgtct ccaaaaagaa tttgagagac attttaagga cctcaggttc 480
 attaaaaagg acttaggact tttttcaaact ccatttaact ttaaacctga atatgcacct 540
 atttcagtga ggggtggagct aacaaaactt caggcaaaca ctaatctttg gaatgaatac 600
 agaatcaaag acttggggca gttttatgct ggattgtctg ctgaatccta cccaattatc 660
 aaaggggttg cctgtaangt ggcatacctt tttgatagta accaaatctg tgaaaaggct 720
 tttcatatatt gactcgaaac caacacactt tgagtcagcc attaacagat gagcatctcc 780
 naagccctgt ttcggggttg ccacaactga aaatggagcc ccggttggga tgaccttgtg 840
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<210> 4738

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4738

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 agcactaaga cattctagag tccttgattg ttcaccata cttccatttc tttattcaat 420
 aaacatgtat taagttccta ttatgtcaga tgtgcaaatt cttatggtaa taaaagatg 480
 tatgagacat agacacttta tttagtcaaa cactcaacaa tatttgaaca tctactgtgt 540
 acaagggtgt aaggatcaat aaaggagtag tgcagtttaa gacaacacaa caaaaacaaa 600
 ctcttcactc cactggctgt aacacatttc tactctgaga tcttcattggc acaacttctt 660
 gaacaagtgt tttcaatagt cactcncttc anattttttc ttccanttcc tcaaacatac 720
 aggaagaaaa cgttgtggtt ggg 743

<210> 4739

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4739

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ggatggcagc aggggcgcgc gggtcctctc gacgccagag agaaatctca tcattctgtgc  180
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agttanccca agaagattct ctcctacatg ggcaattttc acaagcagtc actcccccta  720
acccatcatc acacaagatt tattcaaaag nccaaccgat tatctcaatg gngaagaaca  780
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<210> 4740

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4740

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tgctccaggc tttcagtacc accctaactt acctatgcat gccgtcataa tggaaaagtc 180
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 tgggggggaan tcatagaagt aacagtttta catattgatc aagttgggat gtcctggagg 720
 naatttaaat cagagtgtc aatatagaca ttccttgcaa gctgatacgg taggngcttt 780
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<210> 4741

<211> 755

<212> DNA

<213> Homo sapiens

<400> 4741

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aaactcctaa cctcgngatc cgcctgcctc gacctcccaa agtgctggga ttacaggcat 660
gagccaccat gccagccaa agntcatttt ttaaataagac ttcaaccctt tgtaaatact 720
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<210> 4742

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4742

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gcaagaagca agctagaatc tcnttgcana gaacttcanc gtcacaataa 710

<210> 4743

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4743

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 gcgctggacg accggctcta ctgcgtctac cagagcatgg tgctcttctt cttcgagaat 180
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 tacnggtggg ttatgaaggg aaaagacnat ggaggggcaa cgan 704

<210> 4744

<211> 813

<212> DNA

<213> Homo sapiens

<400> 4744

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 cgcttgaag ataatacagc catctcttct agcccatgg cagcattgca gattccagtc 180
 cagatcacc atgtttcttc agcagactct cctgctaccg ttgactcaga aacaataaca 240
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 ggcactccag gcacctacct acttcaaaca agctcaagcc aaggccttcc cctaactctg 360
 actgctagtc ccacagtaac cctgacagct gctgctcctg cttctcctga acagattatt 420
 gttcatgctt tatccccaga acatttggtg aacacaagtg ataatgttac agtgcagtgt 480
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gccctagaag cagacacttt cccagatgaa attcatcacc ctaagatgac tgtggagcca 660
 tcatttaatg atgctcatgt atccaaattc agtgaccaa atagcacaga actgatnaat 720
 agtgttatgg tcagaacaag aagnaagaaa tctctggaca ccggacctta aacaaagagg 780
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<210> 4745

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4745

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<210> 4746

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4746

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ccaaaggcaa ccagatatTT gtcaagaaat ctaccttttt gaccttgacc ttggcaagaa	720
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<210> 4747

<211> 635

<212> DNA

<213> Homo sapiens

<400> 4747

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ccccgcgctg ctgggcgaca gggtcgctcg cgcggcttct cttcaagctg cggccacccc	180
gaccacacca aggaagccgc cgaggccgag tcagggatgg ccccggcgg gcctggggaa	240
ggcgacggaa gcttggtgaa cgcttctagg gacctattaa aagagttccc acagcccaaa	300
aatcttctca acagtgtgat tggaagagcc ctcgcatct cacatgcaaa agacaaacta	360

gtctacgtgc acacaaatgg accgaagaaa aagaaagtca cactgcacat aaaatggccc 420
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gctgcancct gccagctggt caagggttgg ggtctgctag gtccccggaa tgagttgttt 540
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cgtccggaac ccatnatgcc cctacttcct ggcgg 635

<210> 4748

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4748

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ttatcatgaa attccccctt gtcaatttta taaaatgcct aattttaaca atccantttt 780
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<210> 4749

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4749

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acgtattgat tatagcagta ctatagttat tctgctgtca ttattaaaga tgattatatt  180
cattcaaagc tttagatgtg tcccatgtgg caagaaagga gacagtgaat tttgtcaaac  240
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gttatttcca ctgaaatttg ttatgtttaa ggaaattaag attttaagct tgaaattata  360
caagcagaat ctaatttaat tttgattgac tgaagaacca gggctctttg ctctcctttg  420
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cattctttta ttcagcatct ccctatgtat gtgtcataga atacttagtt ctgctagata  540
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gggctcaatg ttttccaaaa ccttatttga ccccaaaaac ctttttcata tacccaataa  720
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taattcc                                         787
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<210> 4750

<211> 625

<212> DNA

<213> Homo sapiens

<400> 4750

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actctaattc gtgctggaat gacagaagag gcacaacgac tctgtaaagc ctgtgggtcaa  180
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gcatggagag ctgcaacact tgaaggctgg aaactgtacc atgaccctaa tgtaaattga 240
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<210> 4751

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4751

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 tctgaataaa ggatgagccc agggcctgct gccactgtc tgctctgatg accctctctc 180
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<210> 4752

<211> 431

<212> DNA

<213> Homo sapiens

<400> 4752

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actgagcaga gcagagcatc tagccaaagg ggagatgagt ttgtctgtcc tctgctgagg   180
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gaggtggcgc cgggacttta accccttgtg ggctctgcgg caagggattt aaccctttgt   300
ggatctggcc cctcgggtggc agcgtcatcg gtagttttaa ccccttcgng gctggntttc   360
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<210> 4753

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4753

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tgaggaggca gacgtccggt cccttgtagc ttgctgtgtg ggacaaggct gaggactcag   180
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aaggagactg taactttgtg gcacctcaag gaatttcttc aattattaag cattacttga   420
aagaatcagg tgcagaagtc tacttcagac atcgtgtgac acagatcaac ctaagagatg   480
acaaatggga agtatccaaa caaacaggct cccctgagca gtttgatctt attgttctca   540

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caatgccagt tcctgagatt ctgcagcttc aaggtgacat caccaccta attagtgaat 600
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 ttatgaagct ggtacgaaga ttgatgtccc ttggggctgg ggcantacat caccaagtta 720
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<210> 4754

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4754

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 gcacaaaacc tggctcctat caagcttctg catctatctt ttttctatt tttctctcaa 180
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 tagtcaactt tctaattgaa tgttaaagtt tatatatttg taaatgttat tgttataaaa 480
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 aagatcatga acatcagtat ttatctgagg aacatcctgc ggaggaatcc ctttcccat 660
 ttattaaaca caaaattgcc antgtttcaa gtagttcccc ggatcgatan gaccaacaac 720
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<210> 4755

<211> 697

<212> DNA

<213> Homo sapiens

<400> 4755

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<210> 4756

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4756

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<210> 4757

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4757

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<210> 4758

<211> 898

<212> DNA

<213> Homo sapiens

<400> 4758

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<210> 4759

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4759

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cagatgaaac atgtaatttg ggatgggttct tcctttgtca cttaaaggaa gagataggaa 300
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 atcctagggt gagttaaaag tccctgggtgc atccaataat taanatgggc aaggttttgg 780
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<210> 4760

<211> 626

<212> DNA

<213> Homo sapiens

<400> 4760

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<210> 4761

<211> 825

<212> DNA

<213> Homo sapiens

<400> 4761

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aattgcttta atgangccca tggttactca aggattcctt aagtaaattc aggaaaccnc  780
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<210> 4762

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4762

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ggcctttgca ctagtagatc attgctgaca taggtcagtt tagagacctt tctgtgttaa 180
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 cttttaatca agatacctgt gttgctgtta nctgaactgt agtgaagcat cgatccaaat 660
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<210> 4763

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4763

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 cccatccaga ccccgaacca gacccctcag caggctccgg tgacgcctag gaaagaaagg 180
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 aaaacacagt atgttantgt atttaagtc cattataagc agttttgcta agcgaaaaat 600
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<210> 4764

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4764

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cgttggattt gcaaattttg tggactttta ccctagtggg acatgcatag cttcagcagg  180
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taatccaaag cttgaggtaa tcgatttgca gatctctact cccctggta agggataacc  660
ctttcttttt gattcctacc aacaacaaac aagaaaccca gtgggtaagg actcctggcc  720
aanacaaagg ggttgaaana aagggcctgg tggggataaa tttccttgga aanccccttt  780
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<210> 4765

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4765

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 acatgctccg agatgatgga ggctttgagt acaagcgggc cattgtggac tgtataatca 660
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<210> 4766

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4766

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 agaaaatgta acctttgtga ttggtttacc ttttctttaa ttctagggtg ggtatatggc 180
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 aaagggggaa aaagtaattc gaccagaatg gattgtggaa agcatcaaag ctggacgact 480
 cctctcctac attccatatc agctgtacac caagcagtc agtgtgcaga aaggtctcag 540
 ctttaatcct gtatgcagac ctgaggatcc tctgccaggt ccaagcaata tagccaaaca 600
 gctcaacaac agggtaaatc acatcgttaa gaagattgaa acngnaaatg aagtcaaagt 660

caatgggcat gaacagttgg aatgaagaag atgaaaataa tggattttta gtttttgggg 720
atctgggagc aaaacctcct ccgggggaaag ggaaacaaga atgggnantc ccgcatccca 780
ana 783

<210> 4767

<211> 651

<212> DNA

<213> Homo sapiens

<400> 4767

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ggacatccag atgcataaaa atgaatctag atattttgca tttcctgtac cattttgtat 180
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<210> 4768

<211> 891

<212> DNA

<213> Homo sapiens

<400> 4768

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 tcctgagccc cacgctgtcg gatcgaggag gaagtcggca agatgcagcc gacgcaggga 240
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 ttgctcaaaa aaatttttgt ataatgacag tactgataat attagaaatg ataccgcaag 720
 caaatgtata tcacttaaaa atgtcatata ttctgtctgc gtaaaactaag gtatataatt 780
 catatgtgct ctaaattgcag tattatcacc ggccccgcaa aangagtgtc taagnccaaa 840
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<210> 4769

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4769

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 cccaacagct ctactttcta catctactct ctaccaccgc aaaacttctt tcagttccat 180
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atattagttg actgaagaat gactatgtgg taatctattc cattggtggc ctccagtga 540
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agaagccctg tgaccttgct gagacctgaa gagacacata gaganggcac ttgaanggca 720
aggggtcctg actctacatg gagagagaag ccaagcatcc ctgtttccca actgaagtcc 780
tna 783

<210> 4770

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4770

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ttttttttga gatggagtca ctctgtcacc taggctggat tgcaatggtg caatcttttc 180
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tgggattaca ggtgcacacc accacgcttg gctaattttt gtatttttag tagagacggg 300
atttcacat gttggtcagg ctggtctcga gctcctgacc tcgtgatcga ccttccttgg 360
cctcccaaag tgctgggatt acaggcatga gccactgcac ccagccttgg cgggcattctt 420
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tcagaaagga agaaaaatta tccacttgta ggttgtctct aattacttcc ctgaccgca 600
ctcttcattt gtccaantgc tgcagctgtg ctctcaacaa nttttacaac ttctgggaaa 660
natgccccatg g 671

<210> 4771

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4771

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 gaatctccca ggaccctaata atcgcccgag gatgctggga ggaacgctga gccgacctct 120
 ccgttaggct gaagattgca caaacatgc taatggccag catggatgga gggagcgtgt 180
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 tgatcatggc tggctggagt gcagtgggtgc aatcatggct cactgcaacc tcaaattcct 360
 gggctcaagg gatcctcctg cctcagcctc ccgagtagct gggactacag ttcctgctgg 420
 aatcttgctg ttgccattc aagtctggtg gttcctgtgt gttggggtgg ccttgcttct 480
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 atgntgctaa gtaaataaag ancctgaaat cttcccggtg agaanattca aagaaatcaa 720
 ctctgggaa tctgggaata aagacccttt ttcccggtaa aaaaaacccc tngccctggg 780

<210> 4772

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4772

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 cagccttgag tggtagcct actactctga ccaaggaaga agaaaagaaa cagcctgatg 180
 aagaacccat ggacatggtg gtggaaaaac aagaagaaac ggaccacaag aatgacaatc 240
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 ataaagagag catagctgaa tcaaaatccc cagagatgtc catgcaagaa gattgtatta 360

gtgacattgc ccccatgcaa actgatgaac agacaaacaa ggagcagttt gtgccaggtc 420
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 ttcaatggct tcgagcaaat agtagtggtg tcagtgtcaa ttgcaaagga aaagactctg 600
 aaaaaattga aagaatggcg gggtcacgaag cagccaaagt tttgaangan attgtgtggg 660
 acctan 666

<210> 4773

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4773

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 attaggagga gttttgaggc agcagctggt tgtcagtaaa gaattacgga tgtatgatga 180
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 gctcatgtgt tttgaccag atacaagata aatggatgca aaaggctcca aatgactaca 660
 gtcaanaggg cctgcaattg catgtgtaca gtttggggan aagcctccaa ggncattggg 720

<210> 4774

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4774

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 ttctgggtggc ttgggttcat tgtgcattca ttggccactc ttcttgcagc aaattttaaa 120
 tcaatttaaa attaggtaaa ctttttatga tactataata tatatgacgt tgaaatgaca 180
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 aaactaatac ctttgcattt aaaatactga agtattatct tgtagttga agtagatctt 480
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 aagggccgtt tttaaacttt aagcactagt gggattgaaa cctaacctta atatttgact 660
 aaaattgcct gtggaatttt gggaaactaa gttttaantt ttaaaaggca attggttaag 720
 tagnaattaac ccttacnaa aatttatcaa ctttaagg 758

<210> 4775

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4775

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 ttcttatggg gtgtttattg taatcanggt ccaaataata tctatatatt gcaattggnt 600
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<210> 4776

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4776

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 aggcgccc aaatccagccat tacctgctgg actgcggtat atcttcagnc acaggaaagc 660
 cagnntcaaa aacaaaaatg g 681

<210> 4777

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4777

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ttcccttggt tgca 734

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<210> 4778

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4778

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 aagaccggca attgtagtac ttcccaatgt ccatgggttaa tgaaaaggca gccatttggt 660
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<210> 4779

<211> 834

<212> DNA

<213> Homo sapiens

<400> 4779

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 agtggttttc attgtgactt ttatcactat cactaagaat gcaatttaag ttgccttttg 180
 gcatcataga tcatagaaac ttctctctg aatcataccc atgtgtgaat ttctatttta 240
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 tttttaatcg gcaggtatca agttagaatg tatggaattg tgaataaaaa ttatatttta 720
 ttttatgaaa atattttata taataaaatt taaaaggctg ggaaagccaa aaaaatagcc 780
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<210> 4780

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4780

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ttaacctagg agagcactta gaggatttgc tgccgtatct gtcactggta agggcctgaa 180
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gcagagaaag cangtagcta tcagatgact gtcaacagag gaggttcttag aggcctgaga 600
gaacctatgg gttataaatc tcaagggact cctatcaact tcangtattt cagtgttctt 660
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tgntagctga attaaaa 737

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<210> 4781

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4781

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ttgaatcagg agaacaanan aggaagagca aggggaaaaa gcaaatttga aaaatccnca 780
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<210> 4782

<211> 634

<212> DNA

<213> Homo sapiens

<400> 4782

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gcacaggccg agtgcccacc caggagccca cccacaggga gcccaccagg caagcagcct 180
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angaggagat caggattgga gctaagccct gacctcatct caanctgctt ggncccttga 600
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<210> 4783

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4783

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<210> 4784

<211> 775

<212> DNA

<213> Homo sapiens

<400> 4784

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gaacagttgg gactagaagc aaaagtgatt ctgggactaa aataggaagc agatgtcctt  180
tccaatgtg tgttgctgtc ttcacctgaa tgcatttgtg taaaaatagc ggagggacaa  240
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<210> 4785

<211> 628

<212> DNA

<213> Homo sapiens

<400> 4785

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 tctacatcac tgtaagatga ctatcattaa caataataca gagttttcag tagctaggag 180
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 aaaaaataaa aatagctggg gatgatggca gatgcctgtg gtcccagcta cctgggagac 540
 tgangtggga ggattgcttg aaccangtg ttggaggctg cagttagtca nggactgcac 600
 cactgcactc caacctgggt gacagagt 628

<210> 4786

<211> 649

<212> DNA

<213> Homo sapiens

<400> 4786

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aaacaccgga cacgcttggc agaaatcatc gacgattgtg tgacaagtga agaagaagaa   180
gagttagagg aggaggagga ggaggacccg gaagaagata ggaaatccac aaaagaagaa   240
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acagacccca ccaccatctt cccctgcaag gagtgtggca aagtcttctt caagatnaaa   600
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<210> 4787

<211> 649

<212> DNA

<213> Homo sapiens

<400> 4787

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cagccgcaag cgccgaggag ccggaagaga ggCggaaagg gcagcaggct ccttaccag   180
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cggcggaata cggtctcttc aggacattca gcaaagcggg gaggcgggga cctgcgggcg   360
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gcgccaggcc gcagaggctc cggggaaagt tctcttgcc gcgcgagtgg tggcgccccg 480
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<210> 4788

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4788

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<210> 4789

<211> 627

<212> DNA

<213> Homo sapiens

<400> 4789

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 agagatggaa tttcaccgtg ttgcctaggc tggctctggag ctcttgatct caagcgatcc 180
 tccctgcctc ggccctcccaa cgtgctggga ttataggcgt gagccaccgc tcctggccag 240
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 gctgtggccc ggagcagcgc tgctggtgct gttgggggtg gcagccagtc tgtgtgtgcg 420
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<210> 4790

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4790

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 gtgacctggt acatcgccga gttctggaat acagttagta acctgatcat gattatacct 180
 ccaatgttcg gtgcaattca gagtgttaga gacggtctgg aaaaacggtg cattgcttct 240
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<210> 4791

<211> 659

<212> DNA

<213> Homo sapiens

<400> 4791

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<210> 4792

<211> 583

<212> DNA

<213> Homo sapiens

<400> 4792

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tgttcgtaaa taccaaagtc ggcggaag tgaagttgtc tccaccataa cagcaatttt 180
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cactgcttcc ttantttggt gcctttgttc cattgaatgt tcccaataac aaaaattcta 540
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<210> 4793

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4793

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tggtggcaac agctccaacc cctgcaccct tttgtgnca agtccaatgg ggaaanaatg 780
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<210> 4794

<211> 812

<212> DNA

<213> Homo sapiens

<400> 4794

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<210> 4795

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4795

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<210> 4796

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4796

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<210> 4797

<211> 842

<212> DNA

<213> Homo sapiens

<400> 4797

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<210> 4798

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4798

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<210> 4799

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4799

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tgcctgacta ttctaggctg gaggttccta aagagtaaca agaggaagag aaacaagaat  240
ctctgacact tgttgagaat agagcacagt cccatttggt tgaaaagaga caccaggcag  300

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ccatgtttat gtgccagaaa tgcattccac ctcaaggagg acttaattta tggacccgtg 360
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 gactcccgga gcctcagtga gcctcaatta cttcatatgt aaatgaagta atactatcna 660
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<210> 4800

<211> 738

<212> DNA

<213> Homo sapiens

<400> 4800

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 aagaatataa ttaaagtgga attaanaggg ggttagaaaa aaggcaattt agaaaantat 660
 tcctggaaaa ctttaattgt ccaaaaggtg aaacangaag attagacaaa ttccctaacc 720
 cttaagtant ttttttaa 738

<210> 4801

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4801

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aggaataaaa ccacagaaga aaatggagag aaggggactg aaatattcag agcttctgca   60
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cgcctgggca agtacgagca cagcatcagc gtgcggcccc agcagctgtc cgggaggctg  180
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caagccagga ttgccagaa tggaattttg ggagacttta tcattagata tgacgtcaat  420
agagaacaga gcattgggga catccaggtt ctaaattggct attttgtgca ctactttgct  480
cctaaagacc ttcttccttt acccaagaat gtggtattcg tgcttgacag cagtgttct  540
atggtgggaa ccaaactccg gcaagaccaa ggatgccctc ttcacaattc tccatgaccc  600
tccgacccca aggaccgttt cagtatcatt gggttttcca aaccgatna aagtatggga  660
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<210> 4802

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4802

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acattctgta cacacccttg tgttcaggtc gttgaagagg acccatgaca tgtttgtagc  180
tgataatgga aaacctgtgc cttagatga agagagtcac aaacgaaaaa tggcaatcaa  240
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gaagggctct cagaatgcaa cggattcata tggtcataaa cagtaccctg ccaatcaagg 360
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 ttgacagca gatactaaga tccagagaat gccaaagtga tcagctgcac agtccttagc 480
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 ataccgacat cctggggctt ctgaccgtcc acagcctaca gcgatgaatt caattgtcat 600
 ggagactggc aataccaaga actctgcact gatggctaaa aaagccccta caatgccaaa 660
 accccagtgg caccancgt ggaaactcta cagggnatc agtgggcac ntggctgggt 720
 tc 722

<210> 4803

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4803

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 tggacctaan tatttaagat tainaggtt accccaactt gcaagttttt ttcaagccaa 660
 gagatacaat cttaatgaag ggtggctnga 690

<210> 4804

<211> 494

<212> DNA

<213> Homo sapiens

<400> 4804

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gccacctaca gtgagtacct ggggtggcctc tggcctcagg tgttcctgac tggtcctgct  180
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ggggttgcca agtgtgancc atgggtacct gtgcctattg ccagtcctg gtgaaggcaa  420
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<210> 4805

<211> 570

<212> DNA

<213> Homo sapiens

<400> 4805

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ggaattttct ggatgatttg tcatattatt tttcttttaa ctctttgggg attccatacc  180
aaattaaatg actgccataa agtatatttt actcccagga cagattacaa tagccttgat  240
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tttagtcttc ttgcaacagc gattttggga gcagtttctt ggcagccaac aaatggaatt  360
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gaattgggta actgttttagg aggaacatct gttggatatg ctatttgtat tcccaccaac  480

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ttctgcagtc ctgatggnc a gccaacactg cttccccag aacatgtaca aggagttaa 540
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<210> 4806

<211> 543

<212> DNA

<213> Homo sapiens

<400> 4806

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aacctaactt ggatactatg tgtaaaggct tccagagtcc tgataaatct aataactcta 180
caggacagc aattacatta aattcaaac tgatttggtt aggactcct tgtgtcattt 240
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attattttgg gtctcaaagc agtacgggta tttctgacac atgtgctgtt agctacagca 480
atgcacttag ccctcagaag gaaacttctg aaaaagnat tagtaancct cagcaggaan 540
agg 543



<210> 4807

<211> 637

<212> DNA

<213> Homo sapiens

<400> 4807

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tacaatagtg caaaggtaat tcatttgaga aagtagtctt ttcaacaaat ggtgatgaaa 180

cacttgata tccatatgca taaaatgaaa cttgatacac attttatgtc tcatacacia 240
 ataagtcag aacctaaatg taaaacataa aactatacaa cttctagagc aatgggtctca 300
 agtggtagta acttttgtct ccaagaaaca aagtatagag acatttttga ctgtcagtag 360
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 cacaatgcac agcacagtca ccatcacaca cacgaaaatg ccaatttcta gtctggataa 480
 atataccatg gntatgtaac tatctcttat tagaggaaca gnaacttggg aaagagtgtg 540
 tgggaatgct ttttactccc ttgcaactc ttcaggggcaa tagactatac ttcaaagtcn 600
 aacatttaat aanttcccaa tccaattcng ggaaagg 637

<210> 4808

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4808

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 agctataaga acaatgtctt aaaccctgaa gaaatgagac gaagaagaga ggaagagggc 180
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 aatgagaatt gtacattaca gtttggaata ngcccctgcc ctggggctct aaacgaata 540
 ttgcctcctg ggaacctctc agcggggacc aaaaattgtc attgaagcag gggctgtccc 600
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<210> 4809

<211> 635

<212> DNA

<213> Homo sapiens

<400> 4809

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taagtaattt taaaaaaatg tattggttca agtgacttaa aaaccacact ggttccagga  180
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<210> 4810

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4810

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gtcagccttt cctcacgct actccaggtt cactaatgat ctccctgttg cccaaccaat  180
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tactggggct tttttgattc cctgattggt aacccttga gcaagcactc ctgtggccat 480
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 aagggggaaa tctctgccaa aaattaggtg ggctaaagga anctgggttt aaaaagaatt 600
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<210> 4811

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4811

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 nggaacttta actgcaactt cgaaatggtg gtttacccaa nggtttatgg gttaaccctt 720
 tgaatggccn gttcctggga a 741

<210> 4812

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4812

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 agacctgaa aagcaagtct ttcccccaa aaaaanggaa aaatttccc caatgggtcc 540
 tcaaggttcc aagtggcccc tccaanaant ttttaccbaa ttttcaaaag ggtttttaaa 600
 aaaagggaat atttttaaaa n 621

<210> 4813

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4813

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 tcacaaaatt gcctaataca aagttaccat gatgcctgcc tcatctggaa ctgggctccc 180
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<210> 4814

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4814

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<210> 4815

<211> 548

<212> DNA

<213> Homo sapiens

<400> 4815

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<210> 4816

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4816

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caatgcaat 789

<210> 4817

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4817

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caatccttac ttagaggaaat cattgttggga ncatcacaaa catncaacct tttggctgtc 780
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<210> 4818

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4818

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<210> 4819

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4819

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<210> 4820

<211> 668

<212> DNA

<213> Homo sapiens

<400> 4820

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 cctttggggc attctgcctg ggggggccc cttctacnatg ggctgcaagc cgggggcttc 660
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<210> 4821

<211> 706

<212> DNA

<213> Homo sapiens

<400> 4821

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tacttccatt aaaatgataa ctgggtgcac agtgccaact gcaagagtgg tgggtgttaca 660
aaggnaacag agcatccagt tagggaacag cgtgncnaca agcctc 706

<210> 4822

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4822

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<210> 4823

<211> 803

<212> DNA

<213> Homo sapiens

<400> 4823

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<210> 4824

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4824

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<210> 4825

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4825

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attttggaag acagtattca gaaaaaaaaa ttccttaata aaaatacaac tcagatcctt  180
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 cagaatataa taaaatgaga taatctagct taaaactata acttcctctt cagaactccc 480
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<210> 4826

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4826

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 aactttcatc caagatttcc agagtgtcac cctaaggata tccacagaaa tcaatgggtga 480
 tatttgaaga aagaagaatt cagtctcact cagtgaatgt cgcaggccat ttctaaaagt 540
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 atccaggact tgaatttcat tacgagttcc taatagtgtt atttctaaag atgtgtttcc 660
 tanaagaatg tacagcctta tgacactgta ntggatgttt ttaaaaattt ccaaagtaga 720
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aatggagaag ctccttaatt tttgggacan nattccggtc gntttttttt taa 833

<210> 4827

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4827

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ttctctagct attaatcatg aatttgcaaa ganaagtcac ttgnccaagt ccaaattggn 720
taagtccaaa tgagttttct gggaaac 747

<210> 4828

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4828

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aatgactact tgagggctat ttcagagAAC caatatgaaa tgtttttggg agtacaaaat 480
accattgcct taaaagggtt caagcacatt ttcttttcta tttgagaact taaattgctg 540
acttgattc gtttaagcaac cttanaaata aaccactgct tataatctga tgaatattat 600
gcatttcatt cgtacagtta gttgattaga tatttcaggg ttttgcatct tctanagnca 660
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atttcc 726

<210> 4829

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4829

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atgtgtccgg gagacactgt acctcaantc tatattgact aaatccagat ctgtgattga 660
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gaaat 725

<210> 4830

<211> 580

<212> DNA

<213> Homo sapiens

<400> 4830

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cagagactgg gcaatttaca aaagaaagag gtttaattag acttacagtt ccacgtggct 480
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<210> 4831

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4831

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gatgggtcag agatgagaaa gcctccgatt tctctctgtt gggcttttta caacagaaat 180
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<210> 4832

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4832

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<210> 4833

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4833

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<210> 4834

<211> 555

<212> DNA

<213> Homo sapiens

<400> 4834

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<210> 4835

<211> 632

<212> DNA

<213> Homo sapiens

<400> 4835

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<210> 4836

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4836

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ttaaactgca gagtgcaga gatgcctcag tcaagtcagc caaaaacacg cgggtcatcc  180
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tgttctgtct ttcctgggaa gttattcatc ctggtggcca gccaccgac aaaatggatt  360
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cggtaaagga ggttttacac ttttctggac cagacttgaa gagactgacc aacctctcca  480
gccccgaggt ctggcacttg ctgagaacgg cctccttaca cttgcgggga agcagcatcc  540
ttacagcact gcagctgcac cagcagaagg agcggttccc cacgcagcac cagcgctga  600
gcctgggctg cccgggtgctg gacgcgctgc tccgcggtgg cctgcccctg gacgggatca  660
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<210> 4837

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4837

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ttttcacatt actctagtcc ccaagaactg tgggccacca gatgacttca gatgtcccaa   60
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ttctggaagg tttcctgtgg agatagccaa tgagatagat ggaacgtttt cttcctctgg  180

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 gactagctcc ttacctgatg ttgaagcatt gaggttttat ctactctac cagaatgtcc 420
 cctgatgagt gattccaaca atttcacanc aatagcaatt ccctttggta cagctcttgt 480
 gaacctagaa aaggcaccac tgaaagtact tgaaaactgg tggtcagtac ttgaacctcc 540
 actattcctc aagatagtag aactttttta ggaagtgtg gtacatcttt tgaaactcta 600
 caagatcggg attccccctt ctgaaagaag aattttcaac agttttcttc atactggcat 660
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 gg 722

<210> 4838

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4838

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 aaaatacatt ttgagagggg tagaaagaat aagaatataa ttaaaagtat gctaacaaaa 180
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 tggatgatgcc tgtctgtaat cccagctact ctggaggctg aggcaggaga atcgcttgaa 420
 ccggggaggc agaggttgta gtgagccaag attgcaccac tgcactccag cctgggcaac 480
 agagcaagac tccgtctcaa aaaaggaaaag aaaatgcagt ttcatccag ccatccctag 540
 atttcttttc cccttaaagt ggctgaatcc attggagatg tgatttattt tgcagattca 600
 ccaattccaa acttcangaa tattcaagcg ggaagtcatg tgtaagtac agcctttgca 660
 aagaananac tgtggctggg gtgg 684

<210> 4839

<211> 826

<212> DNA

<213> Homo sapiens

<400> 4839

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aaggaagaca gcaagagagg aacagatgga caaaagaatt ataagactaa cacaaaccaa   60
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aggcggatca cctgaggtcg ggagtttgat gccagccagg ccagcatggt gaaaccccat  180
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gcagtgagct gagatcgtgc caccgcgctc cagcctgggc gacagagcaa gactctgtct  300
caaaaaaaca aaagcaaaaa caaaaaacaa taaaatggct gtagtaaatt cttccctata  360
aataattact ttaaattgtaa attgattaaa cccctaatac aaaagatata gaatggctga  420
gtggataaaa aaacaagact acatgctgtc tataagaaac tcactttaga ttttaaggaca  480
cacatagagc aatgtgtgtc cttaaacata ttccatgcaa ctggtaaacg agtgcagaag  540
tggttatact tggatcagac aaaatagagt taaaatttaa aactgtcata agagacaagg  600
aaggacatta tataatgata aaacgggcaa ttcactagga agacataaca attataaata  660
ttcactcaac atcagaacac ctaaatatgt aaagcaaatt ctgatagaac taaagagaga  720
aaagcaatac gattaatatc tgagcctctg gctactttgt aaaaaaggaa aaaaaaagca  780
ttacaattac agttacaagc ctcaatancc cactttcaan nagggg                    826

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<210> 4840

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4840

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 cctgcggcgc agtgggaggc agcccaagcg cactgagcgc gtggagcant tcctgaccat 540
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 tctgaagaac caaaaagcgg g 681

<210> 4841

<211> 570

<212> DNA

<213> Homo sapiens

<400> 4841

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 agatgctgag tcacagctgg ttttgcagga gtggaaaaag gaaaggaagg agatgcgaga 120
 aatgaccaag agtttcttca atgcccagtt tggaagcctg ttccgcacag accagaaccc 180
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<210> 4842

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4842

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ataggtaagt tctccagtgg tgattactga gattttgggg cacccatcac ccgagcagtg   60
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tccccaaagt ccactgtatc attcttatgc cttcgcatgc tcatagctga gctcccactt  180
atatgtgaga atatacattt ggtttttcat ccctgagtta cttcacttag aataatgaaa  240
tccccataca cctaggttca gggctcctcc ccaggaaact tctgaggttt ggggagtcct  300
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gtgacttcag aactgggaag tctaaaccct acagcccctt cttcttctga gccacctact  600
attgttgcag aattgtgtga ctgagtcctg tctccttaaa acgaccataa actcttgagt  660
gcaaaggatt gtattagtca agagtaaagc tatgctgcta nnaaaaaata gtcctacat  720
gcaaaggttc aatacagtag atgtttattt cccggcttan aa                        762

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<210> 4843

<211> 660

<212> DNA

<213> Homo sapiens

<400> 4843

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aaaaatcaga ataagaagta cctgacatac ttcttacatc tgtagttgcg gaagacattt   60
taataggtct tctcatagcc ttcttttgct aaggacattg tgactctcca gagagcaaca  120
gtgatggctc tagaatgtct aggaaaaaga agggcttaat gtcaggagtc tgcttggggc  180

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acacaacact agaagatgtc cttctgcaca ttgtttcata tcgagtatgg aacccttcag 240
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 aatgagagtt atctcaacca gccagcacc cctatcccca tccccacact ttcctcatg 360
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 ccagcctggc caacatggcg aaaccccatc ttactataaa atacgaaaat tagccaggta 540
 ttagaattat ttctgaatta tcagtctctc atttgtgctt tggagaagca gaaaaggcan 600
 aaggggtctt tggccatctt ctgctggagc ttccanggan gatgtgtctc caagagacca 660

<210> 4844

<211> 773

<212> DNA

<213> Homo sapiens

<400> 4844

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 actcttgga gaatttagtt tagttacata ctttttttaa aagataggct ttcattgctcc 180
 tcagttcctt tagtttttaa aaagtttcca atgtgtaaag aaacttccac ctgttaatat 240
 taagaattgg tagctatttg ttaaaactgat ggcatatgaa ggcaagagtc tatgagtcgt 300
 ttctaaagta atagatcttt gaaaatttta aaaagtgaag tttgtcaata acagagttaa 360
 gagctgaatt cttttgtcta aaacttatcg aaattgatgc ttgtactcta ctggctccct 420
 gatgatagta gaaaagcact agtaatgtac caaatgaaac tggttgtgta ccagatgatt 480
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 tttcaagaac atagcaaaag gctgatttta ttctacttca ctttttagaa gtgcattttc 600
 tcaagttaca gggcatttca ctccctttt acatgaagag attttctttt gaatattttt 660
 cctctccttt ggtagcagtg atagacatga ctaaataana tatgggtcct tttggtttgc 720
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<210> 4845

<211> 622

<212> DNA

<213> Homo sapiens

<400> 4845

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gcgctgtgtg cccagcttgc accaccgagc tctggacgct gaggaggagg cctgtctgca  180
cagctgtgct gggaagctga tccattccaa ccaccgcctc atggccgctt acgtgcagct  240
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aaggaaggcc ttggatggac cctcagattg aaggaccggg tggaccttg gggttggtgaa  420
tcctaaacag agagaattcg aggttgcctg aaaagctggg tgccttgct ccttttcctg  480
gagccaatat acccagtttt tactcagttt gatntatatt ctgggcaagg aagctttgcc  540
tactttattg gcacaatccg ttgttctgtc gtttagtgca tatcngctgg cttcagccct  600
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<210> 4846

<211> 476

<212> DNA

<213> Homo sapiens

<400> 4846

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tccaaagaat gttgctacag agacacaatt gaaagggtgg cagcattctc aagctgctcc   60
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gtcttcaaataaatgtggcctt caaagatttt aaaaactttt gtagatagga aaaatttggg  180
agataatact ataaatatgc caccattgag taccatcgat cctagtggga cgcgatccaa  240
aaatatgcct attaaagata atgctttggt tatgtttaat gggaaagtct atctgttggc  300

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taanaagggg acagatgttc tgccatcaca aattgaccaa cagaattctg tttctcctga 360
tactccagta agaaaagaca cgttacagac agtgagtcca agtccagtca canaaatatc 420
caganaggtt gtaaataattg ttttggctaa angtaaactt tcccagatgg agacaa 476

<210> 4847

<211> 630

<212> DNA

<213> Homo sapiens

<400> 4847

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gataggcaga tcacgaggtc aggagttcga aaccagcctg gccaacaggg cgaaactcca 180
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aaaaaaaaag aagggggata aagaaaaaca ctggaaaaag gatgacctgt agttaagtgt 420
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agactgtcgt gggctcattt cctcagcgtg ttgatttagt gactcctgaa ggagcagacc 540
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gtcatctaaa tccattcagt anaccgtaca 630

<210> 4848

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4848

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gcaggagaat cacgtgaacc caggaggcag aagttgcagc gtgccgagat agcgccactg 240
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aaaagagaaa aaagaaataa aaggaaagaa ggctctgttg gagcctggat aggggaaaaat 360
ataccagaga gggacagggg tcaaaacagg aaagtcacat tgaactggaa ttggtaagag 420
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atgataataa taactatatc aagatgacac ttcaaataaa aatataaagc aggacgtgaa 540
acactgtcct cagcaaaaaa cctcaacaat tggggggaga aaaaaanaac accaangggg 600
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<210> 4849

<211> 571

<212> DNA

<213> Homo sapiens

<400> 4849

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atgtcttttag tacaatatat gaattgtata tggaaaaaca tgctttttga aagtcccacc 120
aaaaaggttt ctttatggta tcattaaata taatttcagt ttttatatgt atacatcatc 180
cctgtctctc tttccaggcc gggcatttat atatgtatgg tcagtatatt ttctattatt 240
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<210> 4850

<211> 576

<212> DNA

<213> Homo sapiens

<400> 4850

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gaaacaactg gtgacatcag tgattccatg gattttgtac tgctcaactt tgcagaaatg  180
aacaagctct ggggtgcgaat gcagcatcag ggacatagcc gagatagaga aaaaagagaa  240
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gaaggtgtaa atgtggaacg ttacaaacag attgttttga ctggcatatt ggagcaagtt  360
gtaaactgta gggatgcttt ggctcaagaa tatctcatgg agtgtattat tcaggttttc  420
cctgatgaat ttcacctcca gactttgaat ctttttcttc gggcctgtgc tgagttacac  480
cagaatgtaa aatggtgaag aacataanca ttgcttttaa ttgatagatt accttaattt  540
gcncaccctt aaaaatggnc ctggaatccc agcggg                               576

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<210> 4851

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4851

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cacagacttc ggtggtggtg aagtccatcc cagcatcttc ccctggagca atcacccaca  120
ttatgcagca ggcattaagc agtcacactg cttttaccaa acacagcgag gaacttggaa  180
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aacagactca gctgcaagtg aaaactctgc agtgcttcca gactaaacag aagcagacca  360
tccacctgca ggcagaccag ctccagcaca aactcccgca aatgccccag ctttccatca  420

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ggcatcaaaa actcaccctt ctccagcaag aacaagcaca gccaagcca gatgtncagc 480
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 ccaaattgtc gctcccangc ttcttcaaga ggaaacaa 698

<210> 4852

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4852

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 gatcaatctt accagagggc cctcagggtt gggcttcaac atcgtcgggt ggacagatca 180
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 ctctctctgc atagccagat ttgaagtac tgataccac cccaaacctt gctgttcaca 660
 gtctccaatt ctcatattc taatggggaa aagttaaggt atttgtttga aaggaaaact 720
 gaaagaaaag acntggntta naacaaatgg agggagttat a 761

<210> 4853

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4853

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attggataga gagtcaagac ccatcgggtgt gctgtattca ggagactcat ctcacgtcca 180
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ccaacaaaga tcaaaaagac aaaaaagggc attacataat ggtaaaggga tcaatgcaac 360
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agcaagtctt cagagacctt caaagagact tagactccca cacaataatg ggagacttta 480
acaccccact gtcaatagta gacagatcag caagacagaa aattaacaag gatattcagg 540
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aatcaacaga atatacattc ttctcagcat cctgatccac ancatcacac ttttctaaaa 660
ctgaccacat antggaagta aaacagtcct cagcaaatgc aaaagaatgg aaatcataac 720
aaacagtctc tcagaccaca gtgcantcaa gttagngttc aagattaaag aaacttgccc 780
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<210> 4854

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4854

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ttctatggct ttcccaccac tcatgggtgga gcactctgga tgttttatta aagaaagtct 120
tcttgccacc tatcaaagaa acatatTTTT tagagtcata aaattaaata ctgtgaaacg 180
aaaagatgca aaggaaataa attgaaaatt actaacaaaa caaaaaaccc ctgaatgaat 240
aaaacatgct atactttggc aaatatagac tatagctgat attcaggtaa gcagacaacc 300

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 taataagaac ttgtcctata cttcctatta tttcactgtg ggaagcagtg ttttgtttgt 480
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<210> 4855

<211> 763

<212> DNA

<213> Homo sapiens

<400> 4855

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 tgtgatggct tctgtgtttg tctgtctact ctttcttgga ttggctgtgt ttttctttt 480
 ccctcgctct atcgacgtga aatacattgg tgtaaaatca gcctatgtca gttatgatgt 540
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 aaaggcacgc ttaaacaaac ataagcatta ttgggtccac ttgatnatga aaacaaattt 720
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<210> 4856

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4856

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gaagagatgc cacttggcgg ccatggcagc ttagtatcg gcgactccgg gtcaaggccc 60
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atctgctggt gggaaggcct aaagaactgg aaaagccac tctcttgaa ccaccacacc 600
tgtttaaaga acctaagcac catttaaagc cactgggaaa ttgtgtgccc aantgggttg 660
tgggtgaata aaggagggca aaatgggatg attttcatct ccaattaacc ctgctgtcct 720
ctgggctaan gtttggtggg gaangtta 748

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<210> 4857

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4857

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gagttcgcca gtgggccagg agccgctttt ttccactcgg gaagacttca gagaagtctc 60
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gctacgggccc ctagacaata cgatggaacg ttctatgaat ttcgtactta ttaccttaaa 240

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ccttcaaata tgaatgcgtt catggaaaat cttagaaaa acattcatct tcggacctct 300
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 catatttggg agtatgataa ttttctcat cgagctgaag ttcggaaagc cttagccaac 420
 tgtaaggaat ggcaagaaca atctatcatt ccaaatttgg ctgcattga taaacaagag 480
 acggaaatta cttacctgat accatgggtcc aaattagaaa agcctccaaa agaaggagtc 540
 tatgaactaa ctgtttttca aatgaaacct ggtgggcca gtctgtgggg tgatgcaatt 600
 gaaaaganca attaatgcca tgtcaattta ngntacacaa aagtagttgg ggttttccac 660
 acaggatatt ggggg 675

<210> 4858

<211> 604

<212> DNA

<213> Homo sapiens

<400> 4858

tctctgaatg ctgagttctg ccttaaaaca gcacgggtca tgctagatga aagggatctc 60
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 tctaagttca gaacaaagtg agcaagacca gctggctgct gttggtagca gaggcacagc 180
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 ctacgcctct gaaagtgtg gattgcangc gtgagccacc gcaccaggcc taaacagatt 540
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<210> 4859

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4859

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 gtgtgggaag gcctttctcca aaaggtccag gctcactgaa caccagagaa ctcatacagg 180
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 tatatgcaat gaatgtggaa aaggcttcat ccaaaagggc aacctcctta ttcacgacg 420
 tactcacact ggagagaaac cctatgaatg caatgaatgt gggaaaggct tcagccagaa 480
 gacatgttta atatcccatc agagatttca cacaggaaag acacccttg tatgtactga 540
 gtgtggaaaa tcctgctcac acaagtcagg tctcattaac caccagagaa ttcacacagg 600
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 cagacatcgg gggaactcat acagggggaa agaccgttat ggnttgctct gattgttggg 720
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 a 781

<210> 4860

<211> 715

<212> DNA

<213> Homo sapiens

<400> 4860

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 ataacagaaa gtaacgtgaa ggaattcagg tgactcagac atggaggaga gaagacctca 180
 tctggatgcc aggcccagga attcccatac caaccacaga ggccctgtgg atggagagtt 240

accaccaaga gctagaaatc aggccaataa cccaccagcc aatgctctcc gaggaggagc 300
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 tggcaaccag gactgtagga accgcagacc accatgggtcc aatgacaact tccagcantg 540
 gcggactccc caccaagaag cctacagaac agccacaagc aggcgaagaa actgggctac 600
 aagttcttag aaagtcttct gcagaaaaga cccttctgan gtggtcatca cacttgccac 660
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<210> 4861

<211> 730

<212> DNA

<213> Homo sapiens

<400> 4861

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 gcaccaacag ccgggtcacg gtaggagaat caactattac agcatccggc aaacaactgg 180
 aattgaccag aaatgccttc agaattaggt ctttttgaat cataagcaca gccatttaaa 240
 aaaaattttt taacctagct ttttgagtat tttcaacatt cgtttagca tctcacactg 300
 aaaaaataaa tagtgagatc tggaatgtat atagaagaaa agaaaaatcc attctgtttg 360
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 tcttttgat ttagtagttg accttctaac taagactcat ttctctacag tgaaaaagag 660
 aaaaacgttt taatgtcacc tcaaagaaat gcagagtga gggtgantga aattaanttg 720
 aaggtatcan 730

<210> 4862

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4862

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agacaggagc agtcattccc ttgtagggac aactagaaga aattttatga ataagcatca   60
gaagccagtg ctaacaggcc agcgggtcaa aactcggaaa agggatgaaa aaganaaatt  120
cgaacccaca gtcttcaggg atacacttgt ccaggggctt aatgaggctg gtgatgacct  180
tgaagctgta gccaaatttc tggactctac aggctcaaga ttagattatc gtcgctatgc  240
agacacactc ttcgatatac tgggtggctgg cagtatgctt gcccctggag gaacgcgcac  300
agatgatggg gacaagacca agatgaccaa ccactgtgtg ttttcagcaa atgaagatca  360
tgaaaccatc cgaaactatg ctcagggtct caataaactc atcangagat ataagtattt  420
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aacagagcaa gacaaagttg gcgatgctgt cggggattct gctgggcaat ggnaccctgc  540
ccgccaccat cctcaccagt ctcttcaccg acagcttagt caaagaaggt aacgaggctc  600
ctgttttctc gcctgtcaag acaacanang aaaaatanag tcacagatag ttagaaaaaa  660
tgccaggggc tctttttggg gtcctccaat actcattcct tcatttaaga gaatatcttt  720
gtatgggggtg gtanattgcc ctttcaaatt agtaaaaggg agngggncct gttaatttgt  780
agggaaaagg                                     790
    
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<210> 4863

<211> 600

<212> DNA

<213> Homo sapiens

<400> 4863

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gcttcccgtc cgctgtcctc tgctgccagt cccctgcccc gggcaaagcc catctgggtc   60
gccgagcagg ccggagctat tgggagtggc ggatcctccc accccagccg gatctgggcc  120
    
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atggccgagc ctggagaggg actgccagag gaggtgctgg cactcatctt ccgccacctg 180
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 ccggggctgc gaggcctgcg cctggagtgc cgccggagaaa aaccgctctt cgacgcgggc 480
 cgcgacgtcc tggaggctgt gcacgtgta tgcggggcgg ccaaccagct acgccaactc 540
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<210> 4864

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4864

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 tcaaaagaat gtagagctgg gctggactcc ttagaagaaa gttaagttct gagtgtggga 180
 ggaagtgcct gcacccccac atccagacag cccgtcactc ctgctgccga agactgactt 240
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 cagggatcct ggggtgtggga ccagggagaa tgcccacagg ccccagggcc tttttgagcc 360
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 ggcacccagg ggtggatagg gatccccacc ccacagagag gagaatgccc aagaccaccc 600
 tgccaggagt gtcanggtcc aactctgagg tccgaactgt cggncaccaa nctgttctgc 660
 tgtaaaaggt gcctgggccc cggg 684

<210> 4865

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4865

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tgaaaaccag cttgtagtta gggcccggag cgcatgccat agactcggcg actcaggaat   60
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cctccagtgc ccccagtact gggcgtgagt ccggaagtgg ccacaacca gcctggaccg  180
tcgcttataa agctgtgtaa acctgtataa gctcaggcgt tgacagctgg aaggcagctg  240
gcactggcag ccccttcat tgcacctatc tccccatct cattgccacg gctgaaccct  300
ccttctcaat cttggaacag cacccttctc ttttaagtccc ccaggaccgc acagcctgag  360
ccagatttct actgtgtcaa gtggatccct tggaaaggag aacagacacc catcatcacc  420
cagagcacta acggcccttg cctctcctt gccatcatga acatcctctt tcttcagtgg  480
aaggtgaagc tcccccgca gaaggaagtg atcacatcgg atgagctcat ggcccatctt  540
ggaaactgcc tcctgtccat caagccccag gagaagtcag agggacttca gcttaatttt  600
cagcagaatg tggatgatgc aatgacagtg ctgcctaaac tggncacaag tctggatgtc  660
aatgtgcgat tcacaagcgt ctctgatttt gggatatacaa ccgaggtgca atgtcctttg  720
accctgctan ggaatacctc cgttacaaag gggntgggct tgtttgattc caaaaaa   777

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<210> 4866

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4866

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gtgtcactcg gcccgtcgg cgcgccctt cccagccgcc cttccgtacc ggctctcggg   60
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ctccgagtcg cccctgcgga ctggctctgc acagtgcctg ggcaccgggc gccagacaga  180
cactggccat gacgagcggc gcaaccaggt accggctgag ctgctcgtc cggggccacg  240

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agctggacgt acggggcctg gtgtgctgcg cctatccgcc gggagccttt gtgtccgtgt 300
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 tgcactgtat gagtggccat tccaattttg tatcttgtgt atgcatcata ccctcaagtg 420
 acatctaccc tcatggccta attgccaccg gtggaaatga ccacaatata tgcattttct 480
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 agtctggctg aatgncaagt gcatgatgan cttgcagggg tcatacagat gcggtgtggg 660
 cgggtnaaga tcttacctga aacaagggt taaatgttt 699

<210> 4867

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4867

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 gcttcttctt caggtgtctc cagctccaca caccgtactg agcctcgcca gccaccgtac 180
 gcgaggtcgc ggcggtccg tgacgtcact gatgtgcgt tctccgcac taagggaac 240
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 gaaagctctc gtctaagggc aactttgctg acctgggcct ggagccccgt gtgctgcacg 660
 cactnaaagg gaaggnttgc gccttgaang tcgtttaagc ccaaaaaccg gtggcaattc 720
 caa 723

<210> 4868

<211> 698

<212> DNA

<213> Homo, sapiens

<400> 4868

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tacgttgga  tcaccttgga atcagctggg gatcttttaa ggtgtttctg cctggctccc  180
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gtccctaaaa agtgtttttc atcgttctct aatgttanga tggttggatg tctgaaggaa  540
agtgttgna  ttcttaaaag tactagaaat cttgaaacca agttatgttt ttaaataatgt  600
tttgaatttg ataacttaat aaattgtaat taattaaagt catgtttaac actgggaana  660
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<210> 4869

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4869

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ggcattcttt gtactattg gctcaacacc gtggccctgt ctggtgaaga gtgttgggaa  180
accctcattg gccaggacat ctaccggctc cttctgatgg attttgtgtt ctctttagtc  240

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aattccttcc tgggggagtt tctgaggaga atcattggga tgcaactgat cacaagtctt 300
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 ccccttttga ggtctgcctc tcttcattca ctccatctac aagctggntc gacaccctaa 660
 gtacaagggc ctgggctacc tgtggggttg tttggatcta accgggaacc tcaatgggaa 720
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<210> 4870

<211> 526

<212> DNA

<213> Homo sapiens

<400> 4870

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 caggccgcct ttcgagcgct ttgtgtccat gaaccgcggn atcaacaatg gtagcgacct 180
 gcccgaggac cagctgcgga acctcttcga cagcatcaag agtgagccat tctccatccc 240
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 ctgcctctac tacttcgagt tcaccactga caaggagcca cggggaatta tacctcttga 420
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<210> 4871

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4871

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tagccaaaga ccttgaaaac taacagttgt gctcttcag tttcatatg tgaattcagt 180
gcaagaaact tgggtgtctg tttcttcttt taagctctat gcaatcatgc aaacatagtg 240
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atttgctgta cattttttaa gtttgagttt ttagctcagt tctacctttt atctgacaca 660
ttattactaa gtgggttaact ttgttagact taantggcat gtccggggtc aagttccctt 720
gnatcnaatt ttccgta 737

<210> 4872

<211> 661

<212> DNA

<213> Homo sapiens

<400> 4872

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aacatttcct gcgcagctaa agcaagtctt accagtagga aaccggaact tgctaggact 180
aagaaacttg aggctaggct gaccccatgg ttgttatgat tagaaatccg aggccactgg 240
aaacccggag ctgctgacca acgagtcaca gggtaacttc gccttcgcat ggggaaacgg 300
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<210> 4873

<211> 648

<212> DNA

<213> Homo sapiens

<400> 4873

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 atgcaataga tacaggaaga tttccacggt tgctcactcg gattcttcaa aaacttcacc 180
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<210> 4874

<211> 490

<212> DNA

<213> Homo sapiens

<400> 4874

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 agaagagcgt ccggcgcctc cgggagaagt ttcattggga ggtatcctcc aagaaggcgg 180
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 aagatatgaa gcaggaccgg gacattcagg cagtggcgac ctccctcctg cactgacag 360
 aagccaacct acgcatgttt caacgtgccc aggacgacct tatccctgct gtggaccggc 420
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<210> 4875

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4875

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 gtccagatgt gctctgtgcg tgcattggat ggcttccaat aaagtcaa gacacagtca 360
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 tattggggga tgcctatgaa agacaaagg gagaggagc aggatgaggt gggaaggctt 480
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 ctaaagggtg cccattanag aagtctcggg cctagtgtcc cagccacatg gagtgtcca 660

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<210> 4876

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4876

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cgggatcttt tgatgaagac tgtnaaaata tgggangtga aaacaggaaa gtgtctcaag 720
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<210> 4877

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4877

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 atcactttga gctcaggagt ttgagaccag cctgggcaac atggggagac ccttcctcta 180
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 caccaccgca ctccagcctg ggagacagag tgagaccctg tctccaatat atatatatat 360
 taaataaatg gttaagagct aaccaaagca tatagaggaa tagctttata gcaaataatg 420
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 ggcaagagga cccagcatga ggcacaagga gttcaaggct aagggtgaag ctatgaataa 720
 tgcctgcaa cttcancctt gggtgacaag accaagaant tccaantca aattttttaa 780
 acgaa 785

<210> 4878

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4878

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 tttctctctt tgttgtttaa ggtattaagc acgaattatt acatgagact ggcagatagc 180
 tattaatcct cttacagatt tgagaaagtt gattctcaaa tatttatgca ccttctcctt 240
 cattgttttc tttaaactcg tcctcttaaa aagcttctta agagctcagt taatgctttt 300
 gacttaacta ggagaaaaag gcatgataat acaggcaaga tggcattggt agcaattctg 360
 gtagtggttt ggaatgaatc ctaagaggca gggatcttaa ggacaaggaa gagaagagag 420
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 ttgggcactg tggttttaag aatatctgag taaaataaca atatgannta ataaacagaa 660
 gctctaacgt caggtaacaa atagacagca agaaaggntt gcaccatcct cctaagggct 720
 aa 722

<210> 4879

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4879

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 caccgcaggc ccctggccac tgaaagagtg tgcagtggac tgtgggtctc ccatatgcgg 180
 tgccgcccga aggtggcttt gcctcaagca acctaccctg atgttttact cattggaatg 240
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 ctgcacgacc tgaagttcgc ctgcatttat cagccctctt tgtgctgctc cttgccacct 420
 tgaggttcct gctggggacc atgtgtggtt gtggcatgtg tgagcagaag ggaggatgag 480
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 cctgcttgaa tctgttcgtg ggcaaagggt tgggggaatt tgtgaccctg gnacatcccc 660
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<210> 4880

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4880

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aaaaagaaga actcaaagat acacaaagta atttgaacca aggctcagaa gtttttggag 180
ccgtgaggga tacagcagtt tggtaaatat tgtcttaaca tgcttcaaat aaatcagctt 240
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gcagtataaa gaaggctcag caggctgttg ccaataaagc ttgactgaa tctacgcttc 480
ccaaaccagt tcagaagcca cccaaaagta atgttaacaa taaccaggc agtataactc 540
caactgtggn actgaatggg cttgctatga aaaggggaga gcctgccatc tacagggcac 600
tagatccaaa gccattccca aattatagag ctaattacaa ctttcngggc aatgtacaat 660
cagaggtatc attgcccatt gcctaagatc ttttaagttc agcctcactg gtgggaaatt 720
aatggnantt ttttggggga aaggaaagna c 751

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<210> 4881

<211> 716

<212> DNA

<213> Homo sapiens

<400> 4881

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tttctttctc tctccctttg ttgttatattg atttggggga agggagttag gcttgtgcag 180
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cattcaaaag tgaacacact tggtagctga accatatctg agcagcgtga ttctgttgtc 300
ttgcatatgt tattctctca ggctgtggat ctttggttaca gctctaggaa actgtagaaa 360
tacaatgcta tgtagctttt ccaccccatg gtctctagtg ctgcctatca acttgtcccc 420

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ttttttccca ataacctgtc ttccaggtgg tacagttagc tgtcactcag ctgacacccat 480
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 atgctgtaag actttgtaca tacttcagtt gttangaaat ccttanagaa aaaaagaaaa 660
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<210> 4882

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4882

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 taccgataaa acaagtgggtg gtccaagtag tggaggagggt tttgtagatt ggacttttacg 180
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 ttcagaaaag ttacaggagt tttcatttta ggccctgcac ttcctgggct caaagggaac 720
 nttggaaatt gcantgggat ccagattatc cactgcagta aattattggg aaaatggntt 780
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<210> 4883

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4883

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tacccttagt gaccagttgc tacccaagca ttgtgccaaa actatcagtc aagcagtgaa   180
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aaccattaca agtctataca caaattggna ttggaact ttgttacgac aagtcagcaa   660
tgggcatata gcatatthtc ctgcaatgaa aagcgthtgt gaacttacct acagaaaatg   720
aattaacatt catgcaagag ggaatattct gacatatcag aaatgaggtc attatcanga   780
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<210> 4884

<211> 643

<212> DNA

<213> Homo sapiens

<400> 4884

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ccagtctcca ccagaagthc gggattgcaa aatgggactc tggcagcaaa thtcaaactg   180
tatgccagac ctggccctth gcagtgatat aaaththtth ttgaggtgtc tggaagatg   240

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gctgaatagg aacagctctg ctctgcagct cccagcgaga tcaacgcaga aggagataat 300
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 cagccacag aaggcaagca gaagcagggt ggggtgtcgc ctcacccggg aagcgcaagg 420
 ggtcaggga ctcctcccc tagccaagg aagctgtgag ggactgtgcc gtgaggaacg 480
 gggcattccg gcacagatac tatgctttcc ccacggctct tgcaaccac agaccaagga 540
 gattcccttg ggtgcctgca ccaccagggn cctgggtttc aagcaaaaaa ctgggcagcc 600
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<210> 4885

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4885

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 gtggtggagt ggaagtttgt gttgggtana gaatgggggg agttaccgc tgggaaagaa 660
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<210> 4886

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4886

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 acagaaattg gttctcctcc tcgttttttc catatgccaa ggttccagca ccaggcacct 240
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 cataangggg 790

<210> 4887

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4887

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<210> 4888

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4888

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 catcggggga ctgctacctg ctctctgccc cggggcccca cgtcctgctt ctggggatca 660
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<210> 4889

<211> 612

<212> DNA

<213> Homo sapiens

<400> 4889

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acaccctgat ttcgaaccga gcactgaatc tctccagttc ttgttagata catgtaaagt  180
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gtttttatgt aggcctaaag atattggaag acctaaggct gaagttgctg cagaatttct  360
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cgacactttc tatcgacaat ttcattattat tgtatgtgga ctggactcta tcatcgccag  480
aagatggata aatggcatgc tgatatctct tctaaattat gaagatgggt tcctanatcc  540
aagctccatt gtccctttga tagatggggg gacagaangt tttaaaggga atgcccgggt  600
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<210> 4890

<211> 811

<212> DNA

<213> Homo sapiens

<400> 4890

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acaaaattgc atcaggcccc acaacagctg cttgcatgga atagcagaga ataccgcctg  180
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 ttaaaaatcc aaaattgcct atattccacc tgccaagcaa gaagatgctt tcattaatga 720
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<210> 4891

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4891

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cgaagtggcc ttcaatttga tgttccccg gtaatgaatc ccaatacacc ccaatggagg 780
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<210> 4892

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4892

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gaatgacaag catactggcc cagtgaagac cttggatgtg aacattttcc agactaatct 480
ggtagcttct ggtgctaata aatctgaaat ctacatatgg gatctaaata attttgcaac 540
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cagacaagtt cagcatattt tagcatcagc cagtcccagt ggncggggcc actgtatggg 660
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<210> 4893

<211> 592

<212> DNA

<213> Homo sapiens

<400> 4893

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cgccagttag ccttggggagg ccagagagat ancgccggca tgggaccac tcagtcaaga 480
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<210> 4894

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4894

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ttagtttata gaaaagttaa gtgacatcag gataaattga tatttattat atgaaagtta 180
tgaaaacttt tgtatagttg ctaagtagga ttaaaaaatg agtatcagaa ttttggtaac 240
acagccagag atacatttca tttgcacaca aatgtttttg tgaggtttct ttttcagtta 300
ggaaaatcat taaaatcatg tactgatgta aactaaactt agtaccggac tttcaaata 360
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atttataaat attatatgct cagaatcctt gattgataag agcatatgat taaaaaatga 600
aaacacattg tagagttatt catagtcaca tatggtatgt aactgaatat atatgatata 660
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atatatatca tatattanan antaatataa ccaaat

756

<210> 4895

<211> 716

<212> DNA

<213> Homo sapiens

<400> 4895

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ccatcctact tcctttatag ctgtttcact tggaaactaa tgtgtgggag cacctcctgc 180
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ttagcttatt tgggccttct ccttgctttc caaacgaaat acttcgtctt ttaaattgtt 600
tgctttaacg tgacagctgc gtggaagaaa taatggttgg gcaaacactt ttctattgan 660
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<210> 4896

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4896

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tctaatagga gatgtaacac tttatttcat ggcaggcttt tattgcagag acttgaagtc 180
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 gacacttaat aggtagataa attgtccttt aaaatatccc agatgatata cacaatatgg 660
 tacatttgtg ctctctctct ctgtttttct cccttctctt tccaagttaa gatnaagata 720
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<210> 4897

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4897

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 cgaagccatc gtcacactga ctcttggttg cacacaagtg aactcaatga tggctatgat 180
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 cgccagctct ggagagtcac tgagagaagt gatattgtgg tccagatagt agatgctcga 600
 aaccctactcc tgtttaaatg tgaggatttg gaatgttatg tgaaagaaat ggatgcaata 660

aggagaacgt cattccgata aacaagggaa gacctggctg aactgctgaa gcaaccgna 720
ntgcctgggg ccatgttcct tcna 744

<210> 4898

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4898

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gttctgaaca aatggcattt cctgctcctg accctggcag ttggccccag attccttgct 240
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ttcccatgtg tcctcagtgt cttatcaatg aactatgtgt atcaagccat actaaactgg 420
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tgtccacata aagtaagtcc aagggctatc atatggctaa aatcaagntt atttgggtca 660
acccctggta tgtatttata aagtcaactt atcagccatt taagatggng atttgcntta 720
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<210> 4899

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4899

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 aaggagcgat tcttcatttt ggnacccttt ccttatcttc tgggtaccat gagaaattgt 660
 agactttact cctanattcn cttccaagc cctaaggatt aagccatttt tccaagaaaa 720
 tggttgcata ccattctgcc aatgaaagga ancaaaa 757

<210> 4900

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4900

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 ctgtgtgctt ctcttgatgc gtcagtata gcaacagtca aacacaatct ggaggaactg 180
 gagcaagttg ttataagcc ccagaagttt ttcaggaaag tggaatcacg gattagcgac 240
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 tgcaaagacc tcgaaaactt atctcaaatt caaaataggg aatttggaac acagaaatat 360
 gaacaatgga ttgttacagt tcagaaagca tgcatggtgt tccagatgcc agacaaagat 420
 gaagagagca ggatttgtaa agccctgttt ttatacactt cacatttgcg gaaatataat 480
 gatgccctca ttatcagtga gcatgcacga atgaaagatg ctctggatta cttgaaagac 540

ttcttcagca atgtccgagc agcaggattc gatgagattg agcaagatct tactcagaga 600
 tttgaagaaa agctgcanga actagaaagt gtttccaagg gatcccaaca atgaggattc 660
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<210> 4901

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4901

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 tgggaagata cagtgcagtc ggaagtgtta ctgagagaat ttacacatta tactatgata 180
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 ttgccccaca gcacacctcc ttagatgaaa ttatcttttt tgcataatga cctgagaacg 360
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 ctcttgattc acaagttgtt caagccttgt ttgaagatac aagatataga gaagactgta 660
 gtgcttcccg ggtacagcag ctccctcacc acaagcantt tagattaatn aggaatgcat 720
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 aat 783

<210> 4902

<211> 609

<212> DNA

<213> Homo sapiens

<400> 4902

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 cgactgctct tgagcttggg ctgtccgcc a taccggggga cctggatccc ctgacggcctt 180
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<210> 4903

<211> 620

<212> DNA

<213> Homo sapiens

<400> 4903

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 ggctgcgcca tggctgaagg cagcgtcttt agcctgggtg gcctgcagca gcctgggccc 180
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ggtcctgccc tttngggggg 620

<210> 4904

<211> 705

<212> DNA

<213> Homo sapiens

<400> 4904

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gagtacacag tcattaatga agcctgccct ggagcagagt ggaatatcat gtgtcgggag 180
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<210> 4905

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4905

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<210> 4906

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4906

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<210> 4907

<211> 759

<212> DNA

<213> Homo sapiens

<400> 4907

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 tgtcttttaa acatcctcat gttgcaaacc cagcacttca aatggcctct ccagaggaga 180
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 acaccctgc tggatatagag gactctaaga agtggggcat gctgtttctg ggtgaaccag 720
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<210> 4908

<211> 752

<212> DNA

<213> Homo sapiens